GÖTEBORGS KUNGL. VETENSKAPS- OCH VITTERHETS-SAMHÄLLE

# REPORTS OF THE SWEDISH DEEP-SEA EXPEDITION 1947—1948

*EDITED BY*

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VOLUME IV

## *Bottom Investigations*

FASC. II

GÖTEBORG
ELANDERS BOKTRYCKERI AKTIEBOLAG

REPORTS OF THE SWEDISH DEEP SEA EXPEDITION. VOL. IV
BOTTOM INVESTIGATIONS. NO. 3

# ECHO SOUNDINGS

BY

F. F. KOCZY

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## Introduction

The scope of the echo soundings carried out during the expedition was restricted. The soundings have been taken mainly to facilitate the investigation on or near the sediment carpet. To that purpose the sounding equipment was required to give as many details of the bottom profile as possible. Beside this main purpose the device was used to investigate the general profile between the stations. But only seldom could time be spent to investigate particular bottom features more thoroughly.

Most importent was the knowledge of the bottom profile before trawling in great depth. Only if a smooth bottom surface over the proper distance was garanteed, was the trawl shot, as otherwise the danger of losing the gear was great. For the same reason the change of the bottom structure was followed and at the appearance of hills or features which could possibly be interpreted as rocks, the trawl was hauled. As far as possible rocky bottom was also avoided when the piston corer was in use, which was done on the indications of the echo sounder. The sounder was also of great help when we were taking water samples close to the bottom as even small changes of depth could be detected.

The object of this report is the representation of all soundings after proper correction and to

give a survey of the results obtained. No attempt will be made to give a geological and morphological interpretation of the results as the author does not feel competent to do so. Nor has any attempt been made to draw bathymetric charts (with one single exception) as by our soundings only single profiles were obtained.

The supervision of the soundings during the expedition was in the hands of Prof. H. Pettersson, the leader of the expedition, who had taken a special interest in the development of the echo sounder and who, in collaboration with the senior chief of Marine Instruments Ltd, Henry Hughes, made the evolution of the oceanographic deep-sea echo sounder possible. The proper function was controlled by the present writer who had the best help from the mechanic of the expedition, A. Jonasson, in the repairing of worn parts. The electrical and electronic parts were maintained by Civiling. W. Wentzel who also with never-failing interest assisted in the general maintenance of the equipment. In the later part of the expedition the whole scientific crew assisted to establish a continuous survey of the bottom topography. This aim could only partly be achieved as the device was fed by an electric battery which had to be charged from time to time.

In the preparation of the echograms and the readings of depth and their correction, the writer was assisted by Miss E. Mellberg, Mr. E. Heller and Mrs. E. Juhlin. The last named also prepared new correction tables and drew all diagrams for the report in the most correct and excellent manner.

To all those both on board and at home who helped to obtain and to prepare the echo soundings I should like to express my gratitude for their interest in the work and the help given me.

The writer received much good advice for the representation of the soundings during a special meeting held in Bruxelles in connection with the general meeting of the International Union of Geophysics and Geodesy in September 1951. This meeting, induced by Prof. Pettersson, under the chairmenship of Dr. E. Leloup was attended by Prof. H. Bourcart, Prof. C. W. Correns, Prof. E. Ewing, Prof. Ph. Kuenen, Prof. H. Pettersson, Prof. E. Wegman, Dr. C. Wiseman and Mr. C. Ovey. The writer had the opportunity to present preliminary results of the echo soundings and to discuss the manner of representation. I should like to express my gratitude to the chairman for the most excellent manner in which he led the conference and all the members for their interest which was of great help in the preparation of this report.

## Sounding Equipment

Immediately after the war Prof. H. Pettersson was able, during a visit in London, to persuade the Marine Instruments Corporation (formerly Hughes & Son, now Kelvin and Hughes) to start the construction of a deep sea sounding set. During the expedition on M/S Skagerak in 1946 in the Mediterranean technicians and engineers were given the opportunity to make investigations into the requirements for a continuous recording device.

In order to obtain distinct echoes from great depths with high resolution different parameters determining the sound character have to be mached. The penetration power of the sound energy increases considerably with decreasing frequency but at the same time the beam angle of the outgoing sound increases, which results in the obtaining of echoes from reflecting objects of a wide area and not only from the bottom below the ship. Hence multiple echoes are recieved even from a moderately rough bottom by the use of low sound frequences rendering the deciphering of the echograms more difficult. The power of the outgoing sound cannot be increased beyond a certain level which is determined by the appearance of cavitation

But as the amplification power of the reciever cannot be driven too high for electronic reasons, the highest frequency applicable is limited. It was found that 10 kc gives the best results and this frequency was chosen by the engineers for the construction of the prototype used on the Albatross. This, for deep-sea sounding relatively high frequency, has also the advantage of a high resolving power, as the wave length of the sound wave is only 15 cm. The sound impulse was strongly damped giving a short peak of high energy. This results in a short impulse length. Two echoes reaching the receiver at short intervals could in this way easily be distinguished.

During the expedition we also had the opportunity to prove a new principle invented by Dr. D. O. SPROULE from the Marine Instrument Corp. called frequency bunching. He used the sound wave dispersion in a metal ribbon to concentrate the energy of a wave parcel produced by a wave generator and consisting of a sweep of frequences between 9 to 11 kc. We used it only on a few occasions as its power consumption was rather high, but could not find it superior to the induction charger commonly used. This may be due to the short time available for the trimming of the device.

Dr. D. O. SPROULE and Mr. STANLEY C. SPARLING accompanied the expedition from Göteborg to Oporto during which time they brought the sounding set to toptrim under sea conditions. During the whole expedition it functioned perfectly except for a few brakdowns caused by worn worms in the gearbox.

*Oscillators.*

The magneto-striction transmitter and receiver were of the ring type. The tanks containing them were fitted to port and starboard of the centre line in the central part of the ship. Both were tuned to 10 kc. The diameter of the reflectors was 50 cm. The beam angle containing nearly the total generated energy can be calculated at 20°. The hull plating below the tank was exchanged for a thinner disk of 5 mm. Barnacles and other animals growing on this disk seriously diminished the strength in both the transmission and reception of the sound waves. But during the time the ship was overhauled in the floating dock in Honolulu we could on the advice of members of U. S. Navy change the painting. The new covering of the disk with zinc oxide prevented the animals covering the disk. The receiver was repeatedly magnetized.

*Amplifiers.*

The echo sounder was fitted with 2 independent amplifiers of different power. One of them was a 2-valve amplifier. The overall gain was between one and two million. The other was provided with a third amplification stage giving an overall gain of about 1 000 million. Both were tuned to 10 kc and equipped with initial suppression. The control of the overall sensitivity is affected by means of a potentiometer across the output of the first valve. The low-power amplifier could be used to about 4 000 m whereas the 3-valve amplifier was tested to 9 300 m during the expedition.

During calm weather the transmitting and amplification power allowed soundings to any depth in the oceans, but when the sea was rough the noise level increased and very soon drowned the echo. By changing the course or/and reducing the speed of the vessel it was, however, nearly always possible to obtain bottom echo, if the bottom conditions allowed a rather good reflection of the sound.

*Recorder.*

As the equipment used was a prototype it had no type number. The recorder was of the A/S. type with some alterations. The lay-out was of the MS 19 C. type, but with increased power. The device is now denoted as MS-21 J or K.

The recorder consists of a motor whose speed is controlled by a centrifugal governor. If

properly adjusted the speed variation is lower than 0.1 per mille, but as during use the collectors were worn out a slow change in the speed could be detected. By daily control the change could be kept within 0.6 per cent.

The motor drove a rotating pen over a gearbox. On the same shaft was also fixed the transmission cam which caused the sound impulse to be sent out. The contactor switch was set in such a way that the depth could be read directly from water level. This setting had to be controlled from time to time and if necessary was readjusted.

The recording paper was of the electrolytic type giving a high gradation of the echo strength received. The paper was wet during the recording, and was dried by means of a heater situated under the roller on which the paper was rolled after recording. During a period while the ship was in the East Indies the heater was out of function, which led to two undesirable effects; the iodine diffused from one layer to the next and a false mark was caused on the paper; secondly, the marks faded after a short time and became almost illegible. All other records have, after being stored for 7 years, lost none of their clarity.

The range of the depth recorded was 150 fathoms, which was exactly a fourth of a full rotation of the stylus. By changing the gear the depth range was multiplied by ten. The recorder gave the right depth when the mean sound velocity was exactly 1 500 m/sec. In this case a full rotation should be running for 1.48 seconds. This speed was controlled from time to time, in general once a day, and if the deviation was more than 0.3 per cent the speed was corrected. For the sake of brevity the scale giving a range of 150 fathoms will be called »H R» (high resolution) and the range multiplied by ten giving 1 500 fathoms on the scale »L R» (Low resolution). The zero point could be set in 6 different but equidistant positions around the full rotation resulting in a phasing of the scale by steps of 100 fathoms. The scales given through phasing and the by-ten-scale are as follows:

| H R | L R |
|---|---|
| 0—150 fathoms | 0—1,500 fathoms |
| 100—250 | 1,000—2,500 |
| 200—350 | 2,000—3,500 |
| 300—450 | 3,000—4,500 |
| 400—550 | 4,000—5,500 |
| 500—650 | 5,000—6,500 |
| 600—750 | 6,000—7,500 |
| and so on | |

The speed of the paper transport was about 37 cm per hour giving a spacing of the sounding marks of as little as 0.15 mm working on the HR speed or 1.5 mm on the LR speed. The ships speed was on an average about 7 knots, hence the sounded points were only 5.4 m apart when the recorder was running on the HR speed, and 54 m running on the LR speed. The paper speed for the HR could also be related to the pen speed, resulting in the same exaggeration of the bottom profile for HR as LR. It was possible to read 1 fathom. As also the short time fluctuations of the speed were smaller than 0.01 per cent all relative changes of the depth exceeding 1 fathoms are real.

*Notations on the recording paper.*

The following necessary information was noted on the record:

The time was marked in the right hand margin. The notation was made when the soundings were started and finished, and at intervals of about one hour. The time was ship time which in general corresponded to local time.

The phasing was noted in the centre of the record giving the depth of the lower limit of the range recorded. As the HR recording was easily distinguished from the LR by the distance of the echo marks, the total range of the actual phasing was determined.

The control of the stylus speed carried out

once a day and the deviation from the speed corresponding to a sound velocity of 1 500 m per second were marked on the record. The time for 20 rotations on the LR speed was measured by means of an accurate stop-watch The deviation from 292 seconds was calculated and given in per cent.

Other notes on the record refer to special observations and conditions during the soundings. Often used are:

»Fisk» refers to echo from pelagic fish and the deep scattering layer.

»Rost» to marks caused by hammer blows on the hull of the ship.

Each roll of recording paper was numbered which was noted at the beginning and the end of the roll where the dates of the start and the finish were also noted.

## Evaluation of the Echograms and their Errors

The evaluation of the echograms consists in the coordination of the corrected depth to geographical position. Hence the error made can be caused by an uncertain determination of latitude or longitude *and* by an erroneous correction applied for sound velocity and apparatus speed. On the other hand echograms obtained on slopes show errors in position as well as depth. The different factors affecting the error in deep sea sounding have been discussed by many authors (KUENEN 1935, TOLSTOY 1949, HERDMAN 1948, SCHÜLER 1952) but it seems useful to discuss them here again with reference to the special conditions on board the »Albatross».

From the beginning it was obvious that our soundings alone could not be used to draw bathymetric charts. As also the International Hydrographic Bureau in Monaco is continously preparing new editions of bathymetric charts we had no intentions of making efforts in that direction. The question was how to extract a maximum of valuable information from the soundings, correct it and to represent it in a convenient way for the use of hydrographers and morphologists.

Hydrographers need a list of soundings with all corrections. In order to keep this list as short as possible only one sounding in nautical miles was taken as a rule. But in cases of changing topography the extreme points were also given. In accordance with this list the general profiles were drawn, which consequently show corrected depths. For the study of the microstructure this was not enough, hence for the most interesting and the most typical places detail profiles are given, spaced in more or less equal distances in order to obtain a general survey. Copies of the original echograms completed the picture of the topography.

*Treatment of the echograms.*

The dried recording paper containing about 20 m recorded soundings was immediately rolled tightly in order to avoid direct contact with air. The rolls were put in the original containers which were sealed hermetically. By this treatment the paper was protected from humidity, air and light and all rolls could be saved, except for a few taken during a period when the electric heater for drying the paper was out of order. Now, seven years after the expedition, the records are in nearly the same condition as on our return.

For the purpose of reproduction as well as representation all records have been copied on 16 mm microfilm by means of an automatic reproduction device (Recordak) which allowed the reproduction of the whole length of the recording paper by moving it continously through the apparatus. It works similarly to the special device described by Moore.

Two copies were made, one of which is stored at the Oceanographic Institute at Göteborg and the other at the Hydrographic Office in Washington DC. The reproductions are exactly

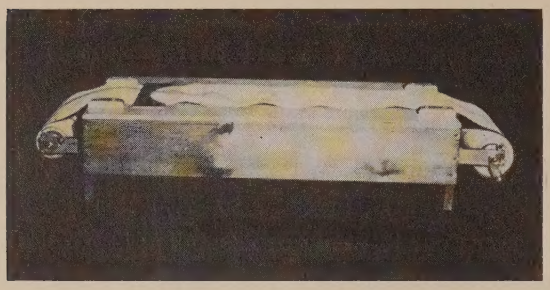

Fig. 1. Readingtable for echograms.

equivalent to the original, low in price and can be very easily handled. The reduction is about 1: 20. The total length of our records is about 1,300 m while that of the microfilm is less than 60 m.

*The reading of the echograms.*

All readings were made on the original echograms and carried out in three stages. In order to facilitate the handling of the rolls a simple reading table was constructed (Fig. 1). The reading was carried out by means of a scale corrected for the shrinking of the paper and delivered by Marine Instruments for this purpose. Special attention was paid to the change of the zero position.

The first reading of the records was carried out in order to obtain a list of soundings. The time interval between the points read was about an hour. The second reading resulted in a denser network, and attention was paid to the irregularities of the bottom. Every height and every depression was indicated and coordinated to the ship's time. After correction for apparatus speed and sound velocity, the depths were transferred to plotting sheets on which the position was read. Thereafter a rough sketch of the general profile was drawn, which was corrected by comparing it with the original record. While this was being done the sections were chosen of which the detailed profiles were to be given. Finally all corrected soundings were transferred to the plotting chart.

*Position.*

As a rule the position was determined by sun observations and dead reckoning. The observations were taken at noon, at 9 am and 4 pm. They are assumed to show no greater error than $\pm$ 2 nautical miles.

The track was plotted on plotting sheets (Fig. 2). The drift caused by currents and wind can be very great, and this had to be taken into consideration on the plotting sheets. Since the effects of currents and wind are less on the stations where the ship was held on the position than while the ship was cruising, difficulties arose in the determination of the proportion of drift on the station to drift during the cruise. It was decided to calculate with the same drift on the station as on the cruise, but it should be kept in mind that the error in the position by this process may be considerable. No corrections have been made, when the calculated position deviates less than 3 nautical miles from the noon fix. On an average the error is assumed to be about $\pm$ 3 nautical miles, but may be as great as 10 miles.

This error of $\pm$ 3 nautical miles gives rise to a relative error of distances in the profiles. The average distance sailed a day was about 150 miles. If the error of 3 miles were made in the same direction as we were sailing, the uncertainty in the determination of the distance may amount to 2 per cent.

The error in the reading of the time was small. One hour corresponds to 37 cm on the record and 5 mm can easily be read, which corresponds to one tenth of a nautical mile on the ship's mean speed. But as the time noted on the record may also be erroneous, by about 2 time minutes, the total error in the determination of time may be about one third of a nautical mile.

*Apparatus error.*

The error caused by the apparatus is due to variations in the stylus speed, which is controlled by the governor.

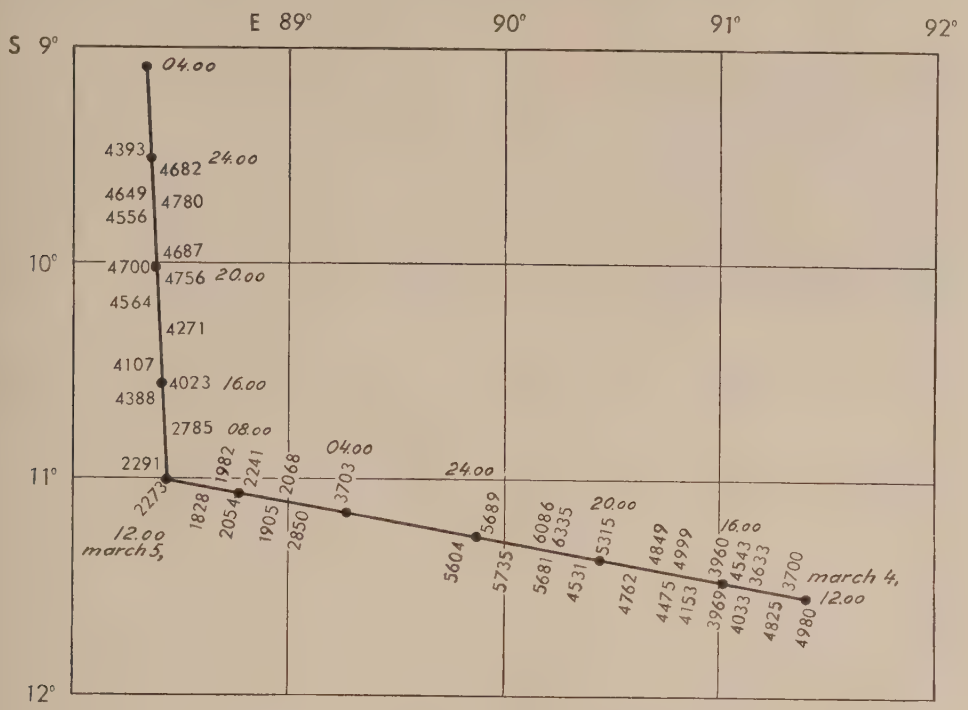


Fig. 2. Plotting sheet with depth observations.

The governor was adjusted to a sound velocity of 1,500 m per sec., which was done by changing the tension of the spring in the centrifugal governor. This adjustment was carried out by the Marine Instruments and needed readjusting only once. On the other hand the carbon disc giving the contact for the electric as control of the motor speed was worn out during use and had to be readjusted once a week. The error was determined every day and if the error surpassed a percentage of 0.6, the stylus speed was corrected. In this way the error of the depth without correction for stylus speed could be kept below 30 meters for the average depth of the oceans. But for the list of soundings the notes of the deviation of the stylus speed were used to correct the soundings. Therefore the error is assumed to be about 1 per thousend, which at a depth of 5,000 m would mean $\pm$ 5 m.

The short-time variation of the speed was small, certainly less than 1 millisecond and consequently gave rise to an error of less than 0.5 m. Only twice during the 15 months was the governor out of function, which was immediately detected by the scattering of the echo marks on the recorder (Fig. 3).

An other source of error caused by the apparatus was the fact that the stylus speed was decreased immediately after the motor was started. But after about 5 minutes the motor had reached a constant velocity, when all mechanical parts were warmed up. The error made by reading the depth shortly after the

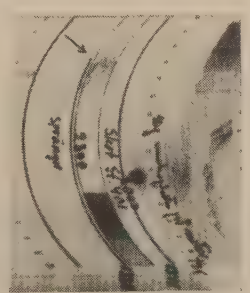

Fig. 3. Irregular scattering of bottom echo, when the governor did not function properly.

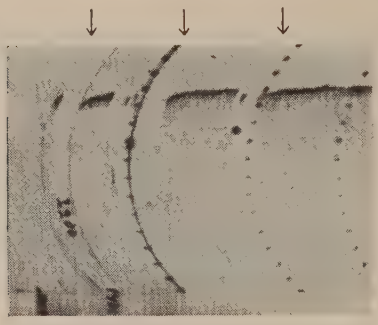

Fig. 4. The slow increase of pen speed after the start of the sounder simulats a decrease in depth.

start was about 5 per thousand and had to be considered. (Fig. 4).

*Sound velocity.*

The stylus speed was adjusted for a sound velocity of 1,500 m per sec, but because of the variation of temperature, salinity and pressure the sound velocity varied in wide limits and was apt to give rise to errors of about 1 per cent for the oceanic average depth. The error would be serious, about 2 per cent, for depths of about 6,000 m. For that reason all soundings have been corrected for the velocity stratification. For that purpose the tables of D. J. Matthews (1939) have been used, but

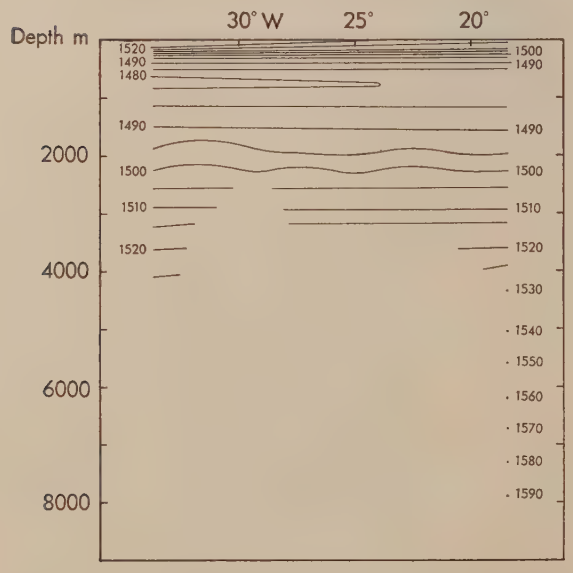


Fig. 5. Sound velocity stratification in the Atlantic Ocean.

for different parts of the oceans it was considered useful to calculate new corrections. These were compiled from our own hydrographical observations. For the calculations the method and constant given in Matthews tables have been used. Fig. 5 shows the sound velocity stratification along the equator in the Atlantic Ocean. It demonstrates clearly the inversion of the sound velocity at about 800 m depth, where the minimum of 1,480 m/s is attained. The velocity in the Romanche Deep reaches 1,600 meter per second.

Table 1 gives the velocities for some of our deep series.

In order to facilitate the reading of the corrections, diagrams have been constructed giving the correction for all depths along parts of our track. Some of them are given in Fig. 6 to 12.

It is very difficult to estimate the error left after the correction for sound velocity was carried out. But assuming that sound velocity everywhere in the ocean is known to 1.0 m near, a probable value, the error is less than 0.07 per cent of the sounded depth.

*Swell.*

As reference surface for the depth determination the sea surface is taken. But it is obvious that this gives rise to an error, as the sea surface in relation to the bottom very seldom keeps its distance. The deviation from the hypothetical surface is of different origin and also magnitude. Air pressure, windstress and currents are factors which have only little effect, which may be estimated at less than 1 m. But on the other hand swell and waves cause considerable movements of the ship in a vertical direction. The error becomes on an average zero since the deviation is oscillatory and therefore no correction can be made. It may be assumed that the error may be as high as $\pm$ 2 m under some circumstances but as a rule it will be less.

The most regular of these disturbances is the swell and under certain conditions it may give

TABLE 1.

*Sound velocities.*

| Depth m | m/sec |
|---|---|
| Station no 52 position Lat. S 2° 52′ Long. 89° 50′ W | |
| 200 | 1,507.8 |
| 400 | 1,502.2 |
| 600 | 1,497.2 |
| 800 | 1,493.9 |
| 1,000 | 1,491.8 |
| 1,500 | 1,489.3 |
| 2,000 | 1,489.1 |
| 2,500 | 1,490.3 |
| 3,000 | 1,491.0 |
| Station no 65 position Lat. 6° 21′ N Long. 103° 42′ W | |
| 200 | 1,513.8 |
| 400 | 1,503.7 |
| 600 | 1,498.8 |
| 800 | 1,495.2 |
| 1 000 | 1,492.8 |
| 1,500 | 1,490.1 |
| 2,000 | 1,489.8 |
| 2,500 | 1,491.0 |
| 3,000 | 1,493.1 |
| Station no 74 position Lat. 11° 39′ N Long. 114° 15′ W | |
| 200 | 1,512.6 |
| 400 | 1,503.3 |
| 600 | 1,498.5 |
| 800 | 1,494.7 |
| 1,000 | 1,492.3 |
| 1,500 | 1,488.8 |
| 2,000 | 1,488.7 |
| 2,500 | 1,489.9 |
| 3,000 | 1,492.0 |
| 3,500 | 1,494.6 |
| 4,000 | 1,497.6 |
| Station no 87 position Lat. 8° 25′ N Long. 128° 48′ W | |
| 200 | 1,516.4 |
| 400 | 1,504.3 |
| 600 | 1,499.1 |
| 800 | 1,495.7 |
| 1,000 | 1,493.1 |
| 1,500 | 1,490.4 |
| 2,000 | 1,490.8 |
| 2,500 | 1,492.5 |
| 3,000 | 1,495.0 |
| 3,500 | 1,497.8 |
| 4,000 | 1,500.9 |
| 4,500 | 1,503.9 |
| Station no 93 position Lat. 0° 06′ S Long. 135° 58′ W | |
| 200 | 1,515.2 |
| 400 | 1,505.0 |
| 600 | 1,499.0 |
| 800 | 1,495.3 |
| 1,000 | 1,492.9 |
| 1,500 | 1,490.2 |
| 2,000 | 1,489.9 |
| 2,500 | 1,491.0 |
| 3,000 | 1,492.9 |
| 3,500 | 1,495.4 |
| 4,000 | 1,498.3 |
| Station no 105 position Lat. 7° 38′ S Long. 152° 53′ W | |
| 200 | 1,537.2 |
| 400 | 1,522.0 |
| 600 | 1,511.2 |
| 800 | 1,504.6 |
| 1,000 | 1,500.3 |
| 1,500 | 1,494.8 |
| 2,000 | 1,493.0 |
| 2,500 | 1,493.4 |
| 3,000 | 1,495.0 |
| 3,500 | 1,497.3 |
| 4,000 | 1,500.0 |
| 4,500 | 1,503.1 |
| 5,000 | 1,506.4 |
| Station no 123 position Lat. 15° 14′ N Long. 152° 48′ W | |
| 200 | 1,520.5 |
| 400 | 1,505.9 |
| 600 | 1,498.7 |
| 800 | 1,494.3 |
| 1,000 | 1,491.8 |
| 1,500 | 1,489.0 |
| 2,000 | 1,488.7 |
| 2,500 | 1,489.8 |
| 3,000 | 1,491.9 |
| 3,500 | 1,494.5 |
| 4,000 | 1,497.5 |
| 4,500 | 1,500.7 |
| 5,000 | 1,504.2 |
| 5,500 | 1,507.8 |
| Station no 133 position Lat. 5° 00′ N Long. 172° 02′ W | |
| 200 | 1,527.5 |
| 400 | 1,509.4 |
| 600 | 1,501.6 |
| 800 | 1,497.1 |
| 1,000 | 1,494.2 |
| 1,500 | 1,491.0 |
| 2,000 | 1,491.6 |
| 2,500 | 1,492.3 |
| 3,000 | 1,494.2 |
| 3,500 | 1,496.5 |
| 4,000 | 1,499.3 |
| 4,500 | 1,502.5 |
| 5,000 | 1,505.8 |
| 5,500 | 1,509.3 |

| Depth m | m/sec |
|---|---|
| Station no 162 Lat. 5° 23′ N Long. 127° 48′ E | |
| 200 | 1,516.7 |
| 400 | 1,503.1 |
| 600 | 1,497.8 |
| 800 | 1,494.5 |
| 1,000 | 1,492.1 |
| 1,500 | 1,489.5 |
| 2,000 | 1,489.3 |
| 2,500 | 1,490.4 |
| 3,000 | 1,492.4 |
| 3,500 | 1,495.1 |
| 4,000 | 1,498.1 |
| 4,500 | 1,501.4 |
| 5,000 | 1,504.9 |
| 5,500 | 1,508.6 |
| 6,000 | 1,512.3 |
| 6,500 | 1,516.3 |
| 7,000 | 1,520.3 |
| 7,500 | 1,524.3 |
| 8,000 | 1,528.3 |
| 8,500 | 1,532.4 |
| Station no 183—184 position Lat. 10° 19′ S Long. 109° 10′ E | |
| 200 | 1,522.4 |
| 400 | 1,509.4 |
| 600 | 1,502.5 |
| 800 | 1,498.3 |
| 1,000 | 1,495.6 |
| 1,500 | 1,492.4 |
| 2,000 | 1,491.8 |
| 2,500 | 1,492.6 |
| 3,000 | 1,494.2 |
| 3,500 | 1,496.5 |
| 4,000 | 1,499.2 |
| 4,500 | 1,502.3 |
| 5,000 | 1,505.6 |
| 5,500 | 1,509.1 |
| 6,000 | 1,512.7 |
| Station no 196 position Lat. 11° 10′ S Long. 96° 15′ E | |
| 200 | 1,526.5 |
| 400 | 1,511.2 |
| 600 | 1,504.1 |
| 800 | 1,499.8 |
| 1,000 | 1,497.1 |
| 1,500 | 1,493.7 |
| 2,000 | 1,493.0 |
| 2,500 | 1,493.7 |
| 3,000 | 1,495.2 |
| 3,500 | 1,497.3 |
| 4,000 | 1,500.0 |
| 4,500 | 1,502.9 |

| Depth m | m/sec |
|---|---|
| Station no 205 position Lat. 4° 47′ S Long. 88° 18′ E | |
| 200 | 1,523.5 |
| 400 | 1,509.3 |
| 600 | 1,503.3 |
| 800 | 1,499.9 |
| 1,000 | 1,497.8 |
| 1,500 | 1,494.8 |
| 2,000 | 1,493.7 |
| 2,500 | 1,494.0 |
| 3,000 | 1,495.5 |
| 3,500 | 1,497.6 |
| 4,000 | 1,500.2 |
| 4,500 | 1,503.3 |
| 5,000 | 1,506.6 |
| Station no 213 position Lat. 4° 12′ N Long. 77° 28′ E | |
| 200 | 1,526.4 |
| 400 | 1,512.4 |
| 600 | 1,506.7 |
| 800 | 1,503.6 |
| 1,000 | 1,501.5 |
| 1,500 | 1,498.8 |
| 2,000 | 1,497.7 |
| 2,500 | 1,497.5 |
| 3,000 | 1,498.5 |
| Station no 223 position Lat. 1° 19′ S Long. 66° 16′ E | |
| 200 | 1,525.3 |
| 400 | 1,511.3 |
| 600 | 1,505.5 |
| 800 | 1,502.8 |
| 1,000 | 1,500.8 |
| 1,500 | 1,497.5 |
| 2,000 | 1,496.0 |
| 2,500 | 1,496.2 |
| 3,000 | 1,497.2 |
| 3,500 | 1,499.1 |
| 4,000 | 1,501.7 |
| 4,500 | 1,504.6 |
| Station no 232 position Lat. 0° 01′ S Long. 54° 16′ E | |
| 200 | 1,525.4 |
| 400 | 1,511.5 |
| 600 | 1,505.6 |
| 800 | 1,502.5 |
| 1,000 | 1,500.7 |
| 1,500 | 1,498.0 |
| 2,000 | 1,496.7 |
| 2,500 | 1,496.8 |
| 3,000 | 1,498.0 |
| 3,500 | 1,499.9 |
| 4,000 | 1,502.3 |
| 4,500 | 1,505.0 |

| Depth m | m/sec |
|---|---|
| Station no 285 position Lat. 35° 41′ N Long. 21° 50′ E | |
| 200 | 1,510.2 |
| 400 | 1,511.7 |
| 600 | 1,513.0 |
| 800 | 1,514.3 |
| 1,000 | 1,515.6 |
| 1,500 | 1,516.8 |
| 2,000 | 1,519.4 |
| 2,500 | 1,522.5 |
| 3,000 | 1,525.4 |
| 3,500 | 1,529.1 |
| 4,000 | 1,532.6 |
| Station no 337 position Lat. 0° 03′ S Long. 18° 13,5′ W | |
| 200 | 1,511.9 |
| 400 | 1,503.2 |
| 600 | 1,497.2 |
| 800 | 1,493.2 |
| 1,000 | 1,490.8 |
| 1,500 | 1,489.2 |
| 2,000 | 1,490.1 |
| 2,500 | 1,492.1 |
| 3,000 | 1,494.6 |
| 3,500 | 1,497.5 |
| 4,000 | 1,500.7 |
| Station no 340 position Lat. 0° 13′ S Long. 18° 26′ W | |
| 4,000 | 1,500.7 |
| 4,500 | 1,503.8 |
| 5,000 | 1,506.9 |
| 5,500 | 1,510.3 |
| 6,000 | 1,513.8 |
| 6,500 | 1,517.4 |
| 7,000 | 1,521.1 |
| 7,500 | 1,524.9 |
| 8,000 | 1,528.8 |
| 8,500 | 1,532.7 |
| Station no 353 position Lat. 0° 06′ N Long. 33° 40′ W | |
| 200 | 1,523.0 |
| 400 | 1,510.1 |
| 600 | 1,501.7 |
| 800 | 1,498.2 |
| 1,000 | 1,494.8 |
| 1,500 | 1,492.1 |
| 2,000 | 1,492.2 |
| 2,500 | 1,493.7 |
| 3,000 | 1,496.0 |
| 3,500 | 1,498.6 |
| 4,000 | 1,501.4 |
| 4,500 | 1,504.2 |
| Station no 373 position Lat. 28° 25′ N Long. 60° 49′ W | |
| 200 | 1,528.0 |
| 400 | 1,523.4 |
| 600 | 1,520.6 |
| 800 | 1,516.9 |
| 1,000 | 1,512.4 |
| 1,500 | 1,505.1 |
| 2,000 | 1,502.8 |
| 2,500 | 1,502.5 |
| 3,000 | 1,503.5 |
| 3,500 | 1,505.3 |
| 4,000 | 1,507.6 |
| 4,500 | 1,510.3 |
| 5,000 | 1,513.3 |
| 5,500 | 1,516.5 |
| 6,000 | 1,519.9 |
| Station no 400 position Lat. 43° 04′ N Long. 19° 40′ W | |
| 200 | 1,508.1 |
| 400 | 1,504.5 |
| 600 | 1,503.5 |
| 800 | 1,503.0 |
| 1,000 | 1,501.9 |
| 1,500 | 1,500.6 |
| 2,000 | 1,499.6 |
| 2,500 | 1,500.0 |
| 3,000 | 1,501.4 |
| 3,500 | 1,503.6 |
| 4,000 | 1,506.2 |
| 4,500 | 1,509.2 |
| 5,000 | 1,512.5 |
| 5,500 | 1,515.9 |
| 6,000 | 1,519.6 |

rise to peculiar records of the echo. When the ship is riding on the top of the swell at the moment the sound impulse is transmitted and the echo is received in the same position, then the depth is increased by the same distance as the ship is displaced by the swell. On the other hand if on the same occasion the following sound impulse is transmitted when the ship is at the deepest point of the swell, the echo is consequently received at the deepest point and the recorded depth is decreased by the same amount as it was increased before. The result is a double echo line. At two occasions during the expedition we could detect double echo caused by this effect. That this was caused by the synchronism of impulse frequence

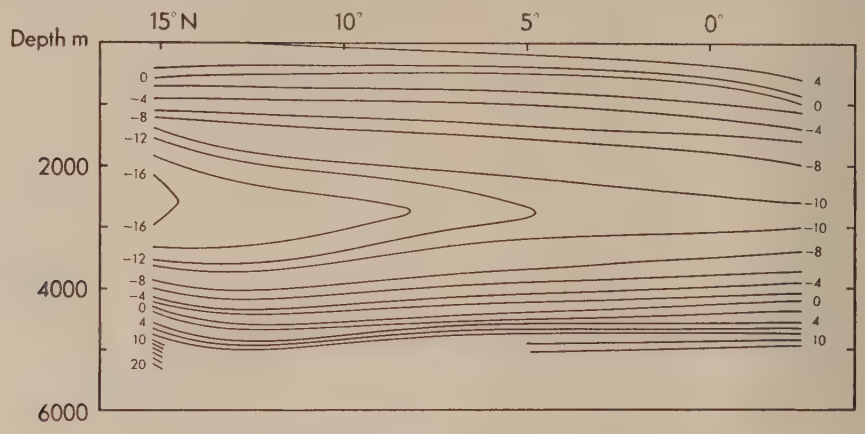


Fig. 6. Depth correction in the Central Pacific Ocean.

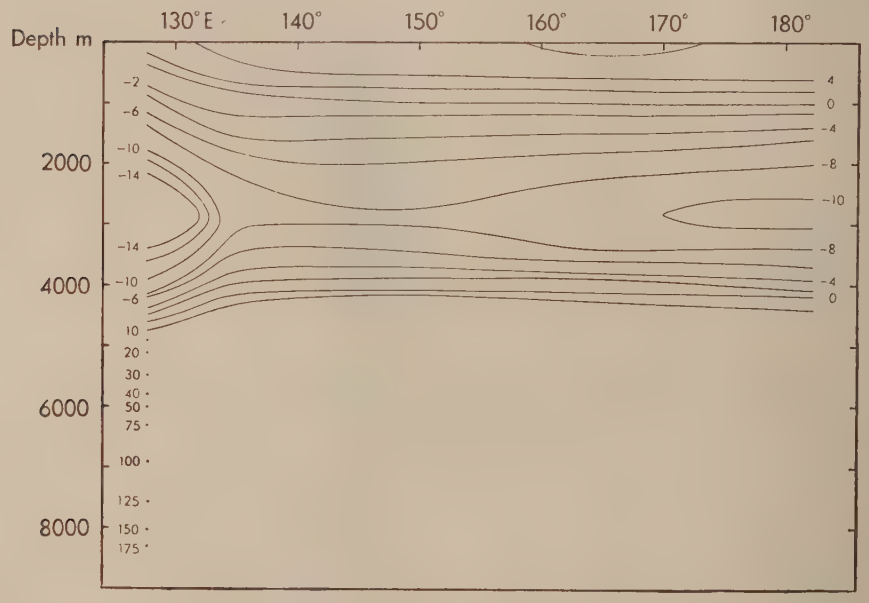


Fig. 7. Depth correction in the Western Pacific Ocean.

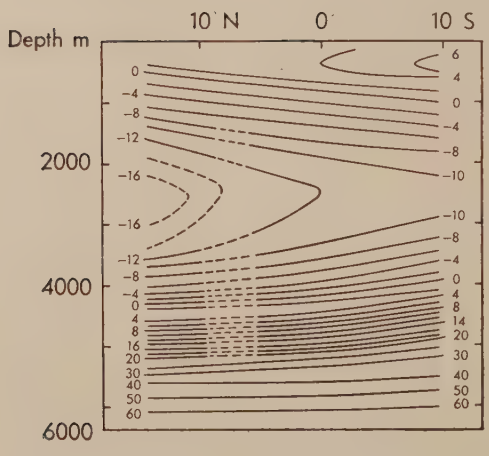


Fig. 8. Depth correction in the East-Pacific Ocean.

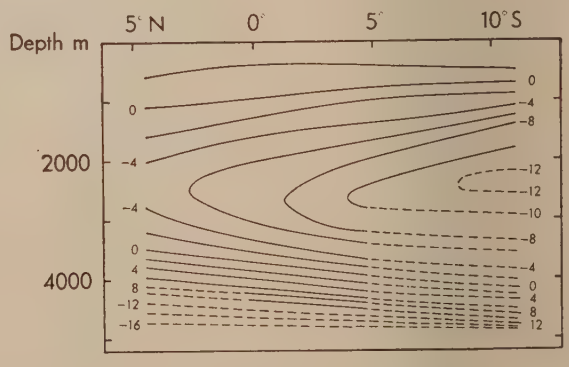


Fig. 9. Depth correction in the East Indian Ocean.

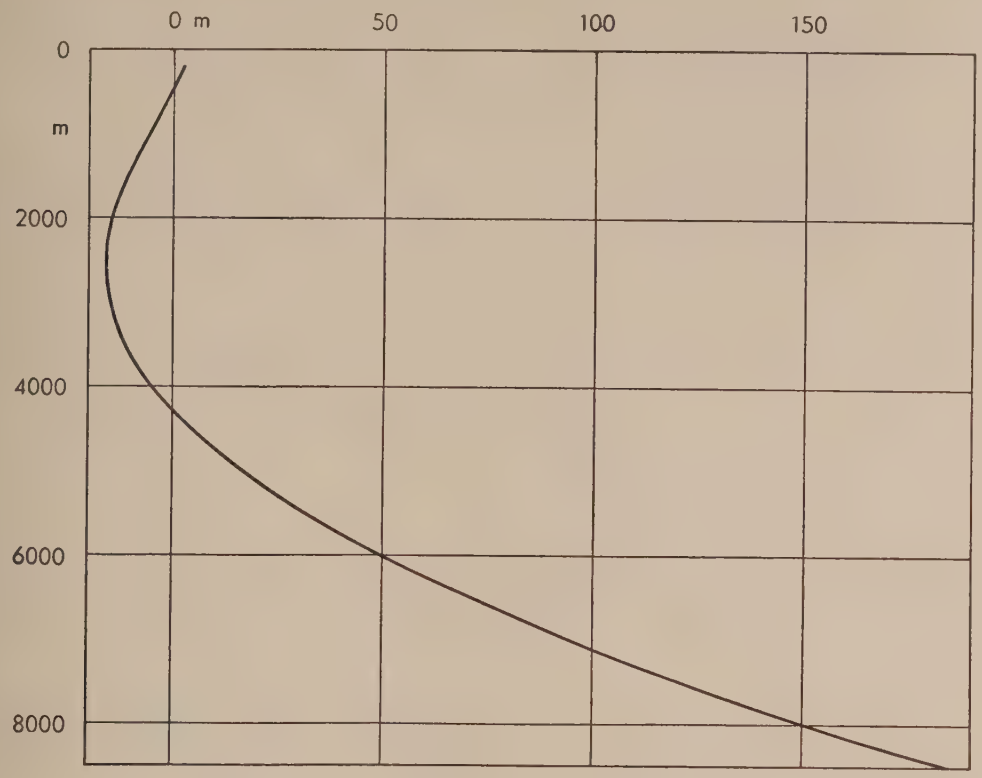


Fig. 10. Depth correction in the Mindanao trench

and swell is here clearly shown, since the moment the coincidence was interrupted by changing to LR recording for a while the double echo disappeared (Fig. 13). On the other hand it is shown that the double echo is composed of two alternating echoes by changing to the high paper transport velocity. (Fig. 14). It must be kept in mind that other correlations of swell frequency and impulse frequency and depth may give rise to peculiar echo recording of a similar type, such as slow undulation of the

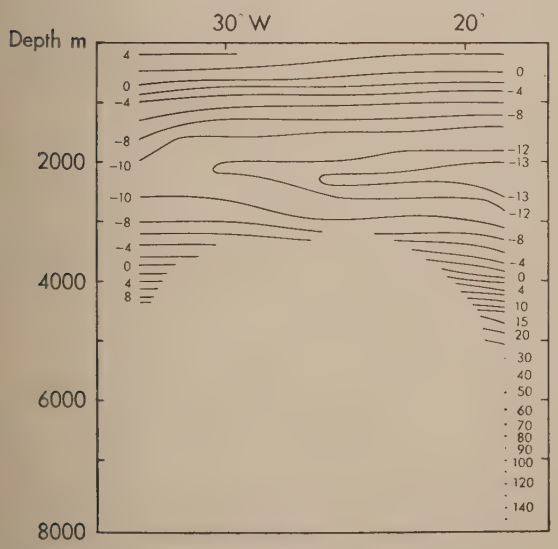


Fig. 11. Depth correction in the equatorial part of the Atlantic Ocean.

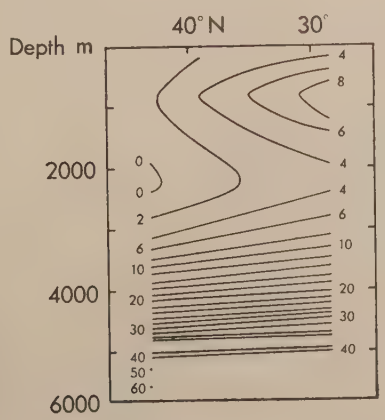


Fig. 12. Depth correction in the North Atlantic Ocean.

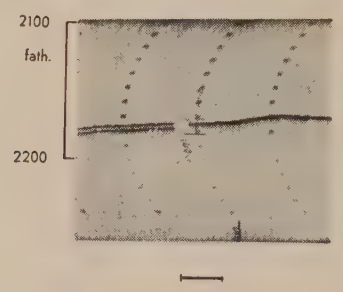


Fig. 13. Double echo caused by the movement of the ship with the swell. Left side in phase, right side out of phase.

bottom or also multiple echo. By changing to a high paper speed the single echo mark is made visible and this may make it possibile to decide whether the multiple echo is obtained in one rotation or if it is the result of successive single echo marks.

*Slope.*

The echo distances obtained represent the true depth only when the sea bottom sounded is level, since it seems to be established that the sound is reflected from the nearest point of the bottom from the ship. But if the ocean floor is sloping corrections have to be made. For hydrographical purpose the corrections concern only the coordination of depth to geographical position. The methods given by Vanssay de Blavous, Shalowitz and Hayes, which are discussed by Herdman, consist of three alternatives. By the first the recorded depth is corrected for slope, by the second the position is moved up the slope until the actual depth at the new position equals the recorded echo distance. In the third method both systems are applied.

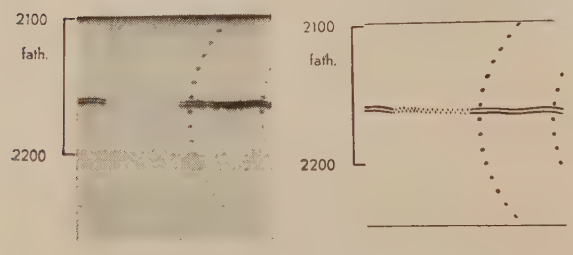


Fig. 14. A similar double echo as in fig. 13, where it could be demonstrated by a high paper speed that the double echo consists of two in time alternating depth indications.

In using the first method, the actual slope should be known. This can only be done if the slope is regular, which is very seldom the case. The usual procedure is to plot the echo distances and to read the angle of the slope. But as by increasing depth the horizontal distance to the reflecting point also increases, the angle obtained ($\alpha$) has to be transformed to the actual angle ($\alpha$) by the relation:

$$\tan \alpha' = \sin \alpha$$

Moreover the assumption of perpendicular reflection allows only angles to be determined which are less than the beam angle. Consequently the slope angle in general should be less than about 10°. At such small angles the deviation of the actual slope from the measured one is small, less than 0.4°.

The displacement of the position, recommended by the second method is given by the formula:

$$d = D \cot \alpha \, (1 - \cos \alpha)$$

where $\alpha$ = slope angle and $D$ = recorded depth, also assumed to be obtained by perpendicular reflection on the slope. As this is the case only by slope angles less than about 10°, the displacement is in the region of 400 m. The error in the determination of the positions exceeds this distance many times. Therefore no corrections for slope have been made. An additional cause was that the task to be performed had become too great.

*Total error of depth determination.*

As shown above the error in the obtained depth consists of the errors caused by deviation from the standard pen speed (a), deviation of the sounding velocity from the standard velocity (s), reading of the sounding mark (u),

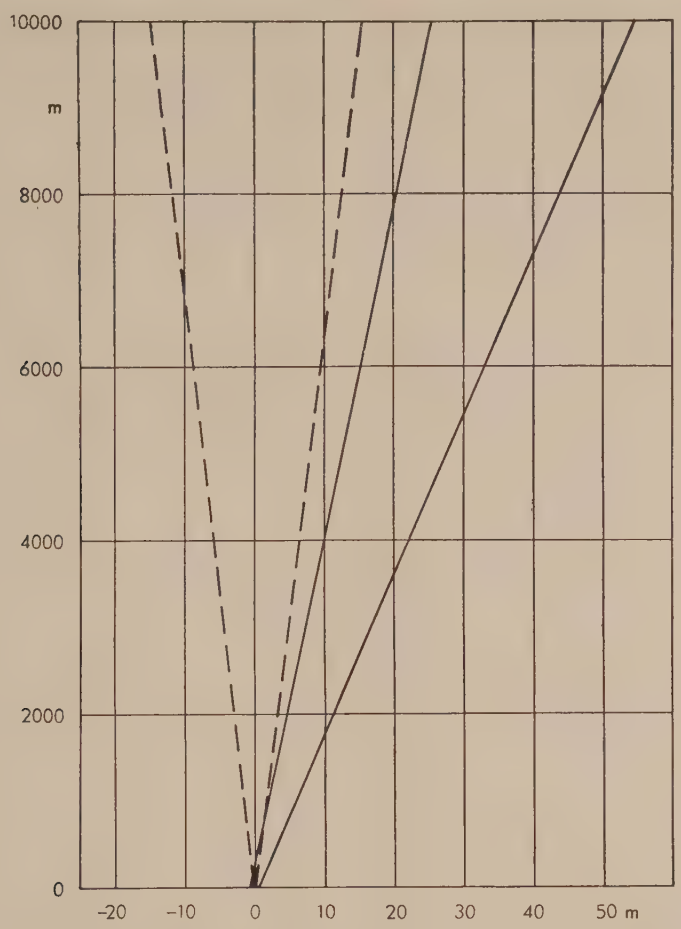


Fig. 15. The total error of depth determination. Broken line gives the error on a horizontal bottom. Full line when the bottom has an inclination of 5°.

vertical movement of the ship and the error caused by the slope.

Some of the errors are dependent on the depth sounded, the others not. The sum of the deviations given by the squares of the mean errors gives the deviation of the total error. By taking the estimates arrived at in the chapters above we obtain an estimate of the total mean error by the formula; valid for reading the HR recording:

$$d^2 = 5 + 2\,D^2, \text{ where } D = \frac{\text{depth}}{1{,}000}$$

Since the reading of the LR records are more uncertain the mean deviation is given by the formula:

$$d^2 = 102 + \mathrm{X}\,D^2$$

In the following table the errors for LR and HR are given for depths to 10,000 m.

The errors calculated here are minimum errors giving the order of magnitude of errors when for all sources of errors corrections have

TABLE 2. *Minimum errors in depth determination after correction.*

| depth | HR | LR | slope 5° |
|---|---|---|---|
| 1,000 | ± 2.7 | ±10.2 | +4 |
| 2,000 | 3.6 | 10.5 | 8 |
| 3,000 | 4.8 | 10.9 | 12 |
| 3,000 | 6.1 | 11.5 | 16 |
| 5,000 | 7.5 | 12.3 | 20 |
| 5,000 | 8.9 | 13.3 | 24 |
| 7,000 | 9.9 | 14.3 | 28 |
| 7,000 | 11.5 | 15.3 | 32 |
| 9,000 | 12.9 | 16.3 | 36 |
| 10,000 | 14.3 | 17.3 | 40 |

been made. On the other hand the error may reach values of more than one per cent of the depth.

At the hydrographical stations where bottom water samples have been taken, the distance from the deepest water bottle to the bottom was known to one meter near and at the same time the depth was determined by thermometric pressure measurement. This gives an opportunity to compare both methods. In Table 3 it can be concluded that a systematic error of 22 m in one of the methods must be involved. The mean error of the difference between both methods after correction for the systematic error is 20 m. That would indicate that the mean error in depth determination is about 20 m if the thermometric determination is supposed to be correct. But with the unprotected thermometers at our disposel, we are quite certain that we could not obtain the exactness as the Meteor expedition had given for their measurements (Wüst 1933). On the other hand it can be concluded that our echo soundings show greater exactness than those given by Wûst, who gives the error to 0.7 per cent. Maurer arrives at the same deviation of thermometric depth determination from the echo soundings.

TABLE 3. *Comparison of thermometric and echo soundings.*

| Station no. | echo depth | thermometric | Diff |
|---|---|---|---|
| 200 | 2,273 | 2,258 | — 15 |
| 205 | 5,029 | 4,999 | — 30 |
| 207 | 4,496 | 4,486 | — 10 |
| 211 | 4,143 | 4,133 | — 10 |
| 213 | 3,159 | 3,120 | — 39 |
| 220 | 3,850 | 3,885 | + 35 |
| 225 | 4,714 | 4,658 | — 56 |
| 228 | 4,082 | 4,016 | — 66 |
| 235 | 6,104 | 5,073 | — 31 |
| 240 | 3,827 | 3,793 | — 34 |
| 254 | 1,903 | 1,937 | + 34 |
| 314 | 4,274 | 4,258 | — 16 |
| 319 | 4,902 | 4,908 | + 6 |
| 323 | 3,101 | 3,065 | — 36 |
| 328 | 5,362 | 5,358 | — 46[1]) |
| 332 | 3,579 | 3,645 | — 27 |
| 340 | 7,599 | 7,594 | — 5 |
| 342 | 5,287 | 5,261 | — 26 |
| 343 | 4,338 | 4,301 | — 37 |
| 345 | 3,124 | 3,265 | + 59 |
| 347 | 3,709 | 3,696 | — 13 |
| 351 | 3,979 | 3,858 | —119[2]) |
| 353 | 4,562 | 4,547 | — 15 |
| 354 | 4,572 | 4,550 | — 22 |
| 357 | 4,470 | 4,436 | — 34 |
| 360 | 4,456 | 4,430 | — 25 |
| 362 | 4,988 | 4,974 | — 14 |
| 367 | 5,757 | 5,655 | —102 |
| 367 | 5,757 | 5,655 | —102[2]) |
| 373 | 5,869 | 5,917 | + 48[1]) |
| 384 | 4,798 | 4,694 | —100[2]) |
| 387 | 4,521 | 4,521 | 0 |

[1]) Obtained on slope.
[2]) Irregular bottom features.

## Representation of Soundings

*Tables.*

From the plotting sheets obtained as described above, the depths with proper positions have been read and collected in a table. All depths are corrected for apparatus speed and sound velocity. The positions are corrected for drift. The errors discussed in the foregoing chapter are applicable. The table contains 4,350 soundings. Since the total track covered by soundings is estimated at about 25,000 nautical miles, the average distance between two depths determinations is about 5 nautical miles. If the profile did not show irregularities but smooth and gentle slopes or plains, the distance may be 10 miles. On the other hand when sea mountains and hills appeared on the profile the distance between two corrected depth determinations may be about one mile.

*Main profiles.*

The same values as given in the table have been used to draw the first sketch of the profiles, and in addition all other information of the morphological structure has been used to give a proper picture of the profile. In order to do this all depth determinations which have not been corrected are used to improve the profile between the corrected soundings. Thus the detail profiles, drawn in order to show

typical and peculiar features, have been transferred. After this improvement the profile was finally completed after direct comparison with the echo soundings.

The distances are given in nautical miles as well as in kilometres, the depths in fathoms and metres. The profile is drawn with two exaggerations. In order to show the details clearly one was chosen to 18.5 to 1, the other is given in 1.85 to 1 in order to give the slope angles as correctly as possible. In this connection it should be remembered that artists in general use an exaggeration of 3 to 1 for drawing slopes of mountains.

In general the profile is represented so that north or west is on the left side of the diagram. All stations are indicated with their numbers and a space about corresponding to 2 nautical miles. The parts of the track also reproduced in the detailed diagram are indicated with numbers under the profile.

The track during which the profile was obtained is given in a chart in the upper corner to the right of the diagram. The given depth curves are taken from the *carte générale bathymétrique des océan* edited by the International Hydrographic Bureau at Monaco. The part of the track where the echo sounder was in use is marked by a continuous line, the other parts by a dotted line. Sometimes it was impossible to indicate short periods of soundings, but with the aid of the profile, which is only given when soundings have been carried out, the proper position on the chart may easily be found.

*Detail profiles.*

Since the main profiles give the soundings on an extremely reduced scale (horizontal distances in 1 to 4,000,000) most of the details are lost. Moreover the measured depths are on an average about 4 miles apart. Hence special profiles have been drawn, which should represent parts of the profile obtained in a better manner without taking too much space.

In order to obtain representative diagrams, they have been selected to give the environment of bottom stations and interesting details occurring between them, but at the same time special care was taken that they were also evenly spread over the whole track.

The depths were read from the echograms at points 1 cm apart which corresponds to 1.62 time minutes, thus they are on the ship's mean speed about 350 m apart. As the depth variations in general were not very great, the depths are not corrected for the errors. The exaggeration is variable, as during the drawing of the diagrams the ship's speed has not been considered, but usually it is about 1 to 20. The horizontal scale is about 1 to 800,000. In this way the detail profile is five times as large as the main profile and it is read with an accuracy about twenty times as high as the main profile. Here too, the exaggeration was reduced to one tenth, thus giving a proper impression of the slopes. Under each diagram the distance corresponding to 5 km is indicated.

Each diagram is marked by two numbers, one denoting the profile, the other the order, which makes it easy to find the position on the main profile, where the numbers and lengths of the detail profiles are indicated. It must be pointed out that the detail profiles are drawn as obtained by the recorder, thus in a manner as the actual profile should be seen perpendicularly from the right side of the ship's course. This is sometimes contrary to the manner in which the main profile is drawn. When the profiles show the environment of a station, the station number is indicated on the diagram.

The plates containing the diagrams are numbered by the number of the profile. Here also the numbers of stations given in profiles are indicated.

*Photographic reproductions of echograms.*

Since the distance of 350 m between measured points was sometimes considered to be too large to show the actual configuration, photographic reproductions are given. Care was

taken that the reproductions selected should be spread as evenly as possible over the whole track and that they should show typical formations. For that reason, too, mainly parts recorded with HR are reproduced.

The exaggeration at the ship's mean speed is here again about 1 to 20 and variable with the speed. Recording with LR the exaggeration consequently becomes 1 to 2. The horizontal scale is about 1 to 160,000. The distance corresponding to 1 km is indicated under the reproduction. Two depths are indicated in fathoms.

The reproductions are marked by the number of the profile and letters in alphabetic order. The letters are also given on the main diagram except when a detailed profile has been drawn; the position of the photographic reproduction is then indicated on the corresponding detailed diagram. The reproductions are assembled with the detailed diagrams on plates, where the profile number and the order letter is indicated, in the same order as they appear on the main profile. It should also be kept in mind that the reproductions give the bottom configuration as if it were seen perpendicularly from the right side of the ship's course. Further it should be observed that the echo marks are made by a rotating stylus and the depth ordinata are circle arcs and the configurations are thus deformed.

## Description of the Soundings Obtained

The main and detail profiles and the photographic reproductions give the main features as well as a survey of the details of the bottom configuration as obtained by our soundings. The most important will be mentioned here and the deviations from soundings obtained by others denoted.

The profiles are arranged in chronological order and on the head of each description its number is given. In general the profiles are chosen so as to start and end at a continent or a group of islands, but sometimes, when they had become too long, they are divided.

The positions and dates of the first and the last soundings are indicated at the head. The part of the track covered by soundings is given as a percentage of the whole profile. Further the numbers of the detailed profiles reproduced and the photographic reproduction are given. The bottom stations in the profile are denoted by their numbers.

As far as possible I have tried to follow the terms of the International committee on the nomenclature of bottom features, but I have used some other terms in a special manner. The term »bottom topography» or »bottom configuration» is used to describe variation in depth which streches over a distance of about 10 km or more, whereas by »bottom surface» the variations extending over a short distance are described. A rough or rugged topography shows variation of depth over an wide area, a level topography means that the mean depth is unchanged. A smooth surface or plain surface means that the deviation from the mean depth taken over a short distance is small, but the mean depth over a wide area is not necessarily constant.

Profile 1.

Oporto—Madeira.
41° 01′ N 8° 52′ W to 32° 52′ N 16° 20′ W.
17th—21th July 1947.
40 % of track covered.
Detail prof.: 5.
Phot. repr.: 6.
Station No. s: 5, 6, 9.

Near Oporto on the shelf a canyon was detected. To the south between 40 and 39° N, the bottom was highly undulating, which may have some connection with the neighbourhood of the shelf. At about N 38° 40′ a sea scarp about 1,000 m high was crossed; here was also the greatest depth of the whole profile near the station 6 with 5,048 m. This deep may be in connection with the basin to the north. From the scarp toward the deepest point the sedi-

ment surface is slightly undulated with increasing height of the irregularities. This gives the impression that the sediment was exposed to horizontal pressure. Two sea mounts were crossed, the first, Josephine Bank, was only touched, but the Seine Bank was crossed over the top with a depth of 172 m. None of the plains between these mountains were really level. The bottom between the Seine Bank and Madeira shows a lot of hills and small depressions.

Profile 2.

Madeira—Martinique.
32° 09′ N 19° 01′ W to 15° 36′ N 59° 42′ W.
24th July—9th August.
50 % of track covered.
Detail prof.: 16.
Phot. repr.: 14.
Station No. s: 11, 12, 15, 16, 17, 19, 20, 22, 24.

This profile shows the impressing mountain chain of the Mid-Atlantic Ridge and the basins to its east and west. The western basin is over a wide range more or less level, but only a small part is really plaine. The average depth is about 5,800 m. Between the basin and the Antilles a trough of 5,300 m depth and a sea mount of 3,800 m was found. The height is supposed to belong to a mountain chain outside the Antilles arc. In the basin a sea mount rising more than 1,500 m could be detected. The bottom profile starts to be irregular from about 56° W and the roughness continues to 36° W. The highest point was crossed at 45° 05′ W, where a depth of 1,429 m could be measured. In the eastern basin the topography is more level, only minor features could be found. After a rise to 4,400 m at 28° W the deepest area at 5,500 m is reached at about 24° W. From here to Madeira the bottom rises smoothly again.

The deepest points on the track are found in valleys to the eastern side of the ridge with depths exceeding 6,000 m. The roughness of the mountain chains is considerable and the depth variations are often more than 1,000 m. We failed to find the Monaco Deep, in its place only a depth of about 5,500 m could be sounded.

It should be noted that no indication of the »terraced zone» found by Tolstoy and Ewing (1949) south of the Azores on the eastern and western side of the Mid-Atlantic Ridge could be detected at the profile taken by the »Albatross».

Profile 3.

Martinique—Cristobal.
14° 45′ N 61° 09′ W to 10° 15′ N 78° 46′ W.
11th—20th August 1947.
85 % of the track covered.
Detail prof.: 6.
Phot. repr.: 5.
Station No. s: 28, 29, 30.

The Carribian Sea, crossed by this profile, is divided by the Beata Ridge into the Colombian Basin to the west and the Venezuelian Basin to the east. Both show a very smooth configuration and plains in the deepest parts. The slope from the west into the Venezuelian Basin is at two points very steep, with figurations reminiscent of scarps. The ridge is about 200 km wide and has a depth of 3,000 m. The deepest point, 5,120 m, was measured in the Venezuelian Basin. The eastern basin is separated by a rise of 1,500 m depth from a shallow basin (2,800 m) to the west of Martinique.

Profile 4.

Balboa—Chatham Island.
7° 15′ N 78° 46′ W to 0° 51′ S 89° 11′ W.
28th August—3rd September 1947.
57 % of the track covered.
Detail prof.: 3.
Phot. repr.: 4.
Station No. s: —

The whole track shows irregularities of the bottom formation. Near the Galapagos the Albatross Plateau was found with a depth of about 2,500 to 2,800 m. At 81° 30′ W a sea mount, rising from 3,900 m to 1,289 m, seems to be crossed. This later environement is

specially rough. From here to Panama the depth is about 3,000 m with small elevations of a few hundred meters.

Profile 5.

Galapagos—Station 80.
0° 10′ S 90° 59′ W to 126° 49′ W.
5th—28th September 1947.
38 % of the track covered.
Detail prof.: 22.
Phot. repr.: 10.
Station No. s: 79, 75, 70, 69, 66, 61, 60, 59, 58, 55, 52.

Three regions can be distinguished on this profile. The Central Pacific Basin with depths under 4,000 m showing a relatively smooth topography with hills of about 50 m high and *horst* and *graben* with a few hundred metres deviation from the mean level at 4,400 m. At 112° W a mountainous region starts which can be partly connected with the Clipperton Island. Three sea mounts have been crossed in this region with depths of 2,896, 2,289 and 2,910 m, the south-eastern part of the mountainous region is very rough but the elevations seldom exceed 300 metres, the mean depth is 3,400 m. At 97° W the slope to the Albatross Plateau rises abruptly about 1,000 m. The roughness is increased, differences of 400 m in depth are common.

To the south of the Galapagos islands the sea floor reaches at 1° 30′ S depths of more than 3,000 m. The deepest point was found at station 54 at 3,561 m and the sea bottom was very smooth with a roughness of only 100 m.

Profile 6.

Station 80—Tahiti.
17° 31′ N 126° 02′ W to 16° 50′ S 148° 57′ W.
28th September—24th October 1947.
34 % of the track covered.
Detail prof.: 14.
Phot. repr.: 13.
Station No. s: 81, 83, 84, 85, 86, 87, 88,90, 94, 95, 97, 98, 99, 100, 101.

The depths are in general between 4,000 and 5,000 metres. Interruption occurs by the Marquesian islands and by the Tuamotu Ridge. The northern part starts from the Central Pacific Basin and rises from 4,990 m very slowly to the base of Marquesas. The sea floor shows a slight roughness with differences in the level of about 200 metres (hill district). Quite near Station 80 a valley is found of about 700 m depth. Between Marquesas and the Tuamotu Ridge the deepest point of the profile was measured with a depth of 5,044 m. This part shows great roughness, only 10 km from the deepest point a sea mount of 2,714 m was crossed. High volcanic activity seems to be characteristic for that region. Between the Tuamotu Ridge and Tahiti the sea floor is quite level with a mean depth of 4,500 m. About 50 km outside Tahiti a knoll was crossed.

Profile 7.

Tahiti—Hawaii.
13° 36′ S 149° 38′ W to 20° 28′ N 157° 7′ W.
5th—28th November 1947.
12 % of the track covered.
Detail prof.: 3.
Phot. repr.: 4.
Station No. s: —.

As the sounding device was not in proper function — one of the gear worms worn out, and the worms manufactured on board did not either work for a short time — only small plots of the track could be sounded. Hence no main profile was drawn and the other reproduction was necessarily sketchy.

Here, too, the depths are in general between 4,000 and 5,000 m but nearer the latter. The deepest point, as far as is known, was 5,789 m at 15° 10′ N, 152° 45′ W. A sea mount was found near the equator with the top at 2,465 m.

Profile 8.

Hawaii — Station 138.
18° 35′ N 160° 35′ W to 2° 33′ S 177° 44′.
15th—26th December 1947.

50 % of the track covered.
Detail prof.: 9.
Phot. repr.: 11.
Station No. s: 124, 125, 127, 128, 130, 131, 136.

The ocean floor on this profile shows depths of more than 5,000 m. After Hawaii we crossed the Belknap Basin where the deepest point we sounded was 5,611 m at N 17° 24′ W 161° 47′. On the rise of a few hundred metres which separates the Belknap Basin from the Marshall Basin three sea mounts could be detected with depths of 2,763, 2,380 and 3,341 m. This rise extends from N 14° 30′ to N 9°, where the Marshall Basin begins. Here we sounded as greatest depth 6,362 m at N 6° 44′ W 171° 36′. The general level in this basin is about 5,600 m deep, from which Baker Island rises abruptly.

If the depth variations, except for the sea mounts, are small the surface of the sea floor on this section is very rough. Nowhere could plains be detected and the sea floor looks as if it were cracked or burst.

Profile 9.

Station 138 — Mindanao.
2° 46′ S 178° 41′ W to 5° 19′ N 127° 52′ E.
27th December 1947—24th January 1948.
69 % of the track covered.
Detail prof.: 13.
Phot. reprod.: 11.
Station No. s: 139, 140, 141, 142, 145, 146, 150, 158.

From the Mindanao Trench, where we obtained our deepest depth registration of 9,233 m, the sea bottom rises steep by to the Phillipine Basin. This shows a very irregular bottom contour varying between 4,000 and 5,500 m. The sill to the western Caroline Basin was crossed with a depth of 3,278 m. Both Caroline Basins, the western and the eastern, show a smooth surface. The western has depths varying between 4,000 and 5,000 m, whereas the eastern is deeper and we could obtain 5,093 m. The eastern border of the basin has its highest point at 2,130 m and is very flat and extended. At about 161° E the depth increases and at 162° a plateau is reached with depths of 4,400 m. Near the slope at 0° 29′ N, 160° 49′ E and at 0° 21′ N, 162° 05′ E two valleys were crossed, the former with a depth of 3,588 m the latter 4,704 m. Then, about 167° E, the sea floor rises again a few hundred metres, before it falls in the Marshall Basin at 174° E. Here the bottom topography is rough, two sea mounts were detected, one 3° 18′ S, 175° 28′ E at 3,748 m and the other 3° 13′ S, 176° 54′ E at 4,022 m. Some hills with depths varying between 50 and a few hundred metres were also found. Even if the high plateau between the Caroline Basin and the Marshall Basin consists of extremely even plains, some features were detected which may be described as *Graben*. (KOCZY, 1954).

Profile 10.

Mindanao Deep — Soerabaja.
5° 17′ N 127° 53′ E to 7° 25′ S 114° 06′ E.
29th January — 7th February 1948.
Detail prof.: 3.
Photogr. repr.: —.
Station No. s: 172, 176, 179.

The records obtained on this section faded and except for the first reading very little could be done with them.

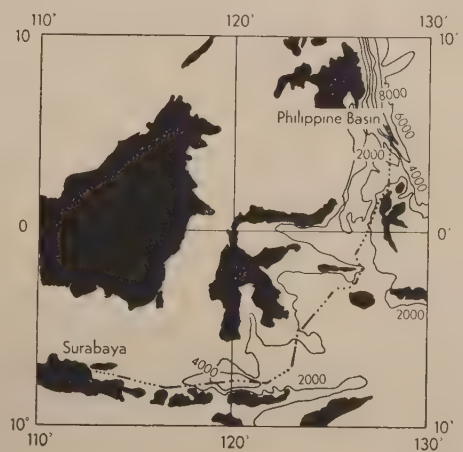


Fig. 16.

Profile 11.

Soerabaja — Station 200.
10° 16′ S 112° 02′ E to 11° 01′ S 88° 26′ E.
23rd February — 5th March 1948.
Detail prof.: 15.
Phot. repr.: 10.
70 % of the track covered.
Station No. s: 182, 183, 185, 186, 188, 189, 194, 195, 196, 198, 199, 200.

This profile is characterized by extreme roughness, high massifs, mountain chains, sea mounts, hilly districts and trenches. The sea floor is generally found at 5,000 metres and lower. On its western side we detected an extraordinarily high plateau which extends at least over 100 km at a depth of about 2,000 m, its highest point was 1,828 m deep. On its eastern side a trench was found at 6,353 m 11° 20′ S, 90° 14′ E. From here the sea floor gently rises to a mountain chain with the highest top at 3,663 m. The differences of level are about 1,000 m except the first mountain after the trench which rises by more than 1,800 m. Between this mountain chain and the base of Cocos Islands a basin about 500 km broad is situated, with several knolls. Its general level is found at 5,500 m. In close connection to this basin are found sea mounts 11° 16′ S, 98° 08′ (2,421 m), 11° 20′ S, 99° 09′ E (1,667 m), 11° 25′ S, 99° 49′ E (3,134 m). The base of Cocos Island and the base of Christmas Island are separated by a hilly district of about 5,000 m depth. On the latter base, which is separated from the hill by a small trench of 5,800 m with knolls, two sea mounts were sounded; one 11° 02′ S, 104° 00′ E at 2,509 m, the other 10° 57′ S, 104° 46′ E at 3,013 m. From here the sea floor falls gently towards the Java Trench. On the slope two further sea mount were detected 10° 37′ S, 107° 02′ E at 3,868 m and the other 10° 23′ S, 108° 31′ E at 4,528 m. The deepest point in the Java Trench we found at 10° 18′ S, 109° 43′ E with a depth of 7,036 m. Off a Java heigh was found with depth of 2,210 m.

Profile 12.

Ceylon — Station 200.
11° 01′ S, 88° 26′ E to 6° 35′ N, 79° 45′ E.
5th March — 16th March 1948.
83 % of track covered.
Detail prof.: 16.
Phot. repr.: 14.
Station No. s: 202, 205, 206, 207, 208, 209, 211.

A large plain stretches here from Ceylon to about 5° S. The part north of the equator is very even and only minor features are found except for a sea mount (Guyot?) of about 50 km diameter at about 3,000 m on the plateau and the highest point 3° 44′ N, 84° 56′ E at 2,918 m. The channels found in this part seem to be graben 50 to 100 metres deep. (Dietz 1953, Koczy 1954). The plain slopes down very gently from 4,100 m at 6° N to more than 5,000 m at 5° 12 (5,127 m). The part south of the equator is characterized by several knolls which rise to a few hundred meters above the sea floor. A mountain chain was crossed south of the plain. Its highest point was determined at 2,874 m at 6° 36′ S, 88° 39′ E. Between this mountain and the high plateau of the central Indian Ocean the sea bottom shows depths varying between 4,500 and 5,000 m and a rough configuration.

Profile 13.

Seychelles — Ceylon.
4° 01′ S, 55° 17′ E to 6° 32′ N, 79° 29′ E.
27th March — 10th April.
68 % of track covered.
Detail prof.: 15.
Phot. repr.: 18.
Station No. s: 202, 205, 206, 207, 208, 209, 211.

The Seychelles rise from the extremely flat Somali Basin, which stretches to the Carlsberg Ridge. It declines gently from 4,300 m to 4,700 m over a distance of 800 km. Only a few hills rises abruptly from the plain without any

other disturbances. In the Carlsberg Ridge, block faulting seems to be the dominating feature. The highest elevation was found at 1° 19′ S, 67° 58′ E at 2,086 m. The deep part of the track between the ridge and the base of the Maldives with depths between 3,500 m and 4,500 m shows a great irregularity. A channel with an extremely flat bottom was found outside the Maldives at station 219. The highest point of the ridge was crossed at 1° 05′ S, 73° 00′ E at 2,183 m. The profile from here to Ceylon cuts the slope of the Ceylon Basin. Three knolls of considerable height were crossed here. The bottom surface is rough and is undulated at several places.

Profile 14.

Seychelles — Cape Guardafui.
4° 17′ S 55° 40′ E to 11° 59′ N 51° 16′ E.
15th—23rd March 1948.
72 % of the track covered.
Detail prof.: 7.
Phot. repr.: 9.
Station No. s: 230, 231, 232, 234, 235, 237, 239, 240.

The only major feature of this section is the North Somali Basin. Our deepest sounding was 5,170 m at 1° 16′ S, 53° 11′ E. The basin is very flat and even, with a depth only very slightly deviating from 5,100 m. The interruptions are 7 knolls and one sea mount which was detected at 4° 13′ N, 52° 48′ E with a depth of 2,630 m.

Profile 15.

Cape Guardafui — Suez.
12° 04′ N, 51° 09′ E to 27° 28′ N, 34° 15′ E.
23rd April — 7th May 1948.
50 % of the track covered.
Detail prof.: 14.
Phot. repr.: 8.
Station No. s: 241, 242, 244, 245, 248, 249, 252, 253, 254, 256, 257, 258, 259, 260.

The soundings obtained show that the northern part of the Red Sea is level but with a rough surface. The depth is about 1,000 m with irregularities of 50 to 100 metres. The deepest sounding we could take was from the central part with a depth of 2,156 m at 20° 59′ N, 38° 07′ E. From here to Bab-el-Mandeb the depth variations are higher and reach 1,000 m. In the most southerly part the deeps between the elevations are flat, apparently due to the accumulation of sediment.

In the Gulf of Aden the sea floor falls down to a trench with a depth of 3,478 m at 12° 45′ N, 48° 38′ E. The total profile is very rough except for the part near the shelf of Cap Guardafui, where a flat surface seems to have been created by washed-down sediment. An elevation of 100 m rises after the slope, which may be explaned by mud slides, which have occurred from the shelf, as indicated by the typical features found on the shelf.

Profile 16.

Nile delta — Monaco.
31° 50′ N, 32° 30′ E to 43° 31′ N, 7° 36′ E.
15th — 28th May 1948.
57 % of the track covered.
Detail prof.: 19.
Phot. repr.: 12.
Station No. s: 272, 273, 274, 275, 276, 278, 279, 280, 283, 285, 286, 287, 288, 289, 290, 292, 294, 295.

The eastern Mediterranean and the Tyrrhenian Sea show an extraordinarily rough bottom configuration due to volcanic and tectonic activity. Between Corsica and Italy a mountainous region was recorded, which increases in depth towards the south. The deepest point in the Tyrrhenian Sea was a flat basin of 3,643 m from which a sea mount rises to 2,309 m at 40° 10′ N, 12° 10′ E. North of Sicily a plain was found at 3,500 m.

The Ionian Basin shows depths varying between 3,000 and 4,000 m. We have not been able to find the Pola Deep and could in this environment in a *Graben* only record a depth of 4,231 m at 35° 42′ N, 21° 52′ E. To the

east and the south of Crete the bottom configurations show great variations in depth. East of Crete three depressions with a depth of more than 3,000 m were recorded. South of Crete we obtained the deepest recording of the Mediterrenean with 4,321 m. Between Crete and Egypt the bottom configuration is more level than in the other parts but the bottom surface is rough, especially in the neighbourhood of Stations 277, 276 and 174.

The slope outside the Nile is assumed to be typical for the slope created by river-transported mud.

Profile 17.

Monaco—Tanger.
42° 56′ N, 7° 13′ E to 36° 02′ N, 4° 37′ W.
5th—10th June 1948.
42 % of the track covered.
Detail prof.: 5.
Phot. repr.: 4.
Station No. s: 298, 301, 303, 304, 305.

In the western Mediterranean a large plain at 2,700 m stretches from the French to the Algerian coast. The surface is smooth, only a small scarp being recorded. Near the Algerian coast steep slopes seems to be more common, presumably as a consequence of great volcanic activity.

Profile 18.

Tanger—Cape Verde Islands.
35° 53′ N, 15° 55′ W to 17° 00′ N, 24° 52′ W.
12th—26th June 1948.
40 % of the track covered.
Detail prof.: 10.
Phot. repr.: 8.
Station No. s: 309, 310, 311, 312, 314, 315, 316, 318, 323, 324.

This profile gives a great part of the East Atlantic Basin, specially the Cape Verde Basin, showing a depth of about 4,500 m with the maximum at 22° 35′ N, 23° 15′ W at 4,936 m. Smaller depths have been recorded near the shelf, near the Canary Isles and on the base of the Cape Verde Islands. The bottom surface is smooth except on the slopes of the shelf where the depth variations are about 50 to 100 m, and on the slope of the islands, where the typical undulations are found, which may be explained by the pressure of the sediment from higher levels. The Cape Verde Islands rise from a plateau at 3,300 m, whereas the Canary Isles rise direct from 4,200 m.

Profile 19.

Cape Verde islands — Romanche Gap.
15° 56′ N, 25° 25′ W to 0° 26′ S, 18° 09′ W.
30th June — 12th July 1948.
47 % of the track covered.
Detail prof.: 7.
Phot. repr.: 14.
Station No. s: 326, 328, 332, 334, 335.

The bottom configuration is very rough, except for the slow dip from the Verde plateau to the Cape Verde Basin and a small part of the Sierra Leone Basin. In the Verde Basin the elevation rise 400 to 600 m above the general level of 5,600 m. Between these elevations small plains of about 20 to 40 km width could be recorded. On the ridge separating the Verde Basin and the Sierra Leone Basin in the south two sea mounts were crossed. We passed the northern one on its western side, where we found 1,319 m at 6° 54′ N, 22° 26′ W. The other one with a depth of 2,189 m at 4° 25′ N, 21° 28′ W is an elevation about 800 m high on the ridge which here rises to a depth of about 3,000 m.

The Sierra Leone Basin shows a bottom surface which in general is rough except for small smooth plains. It consists of two levels, one at 4,500 m, the other at 5,100 m separated by an escarpment. At about 2° N 20° W a mountain chain appears with differences in depth of about 1,000 m (4,000 to 5,000 m). Near the equator the mountains belonging to the system of the Mid Atlantic Ridge reach a height of less than 3,000 m below the surface of the sea. The highest point was found at

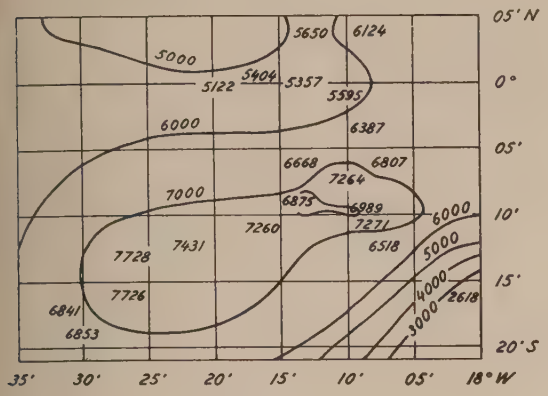


Fig. 17. Depth chart of the Romanche Deep.

0° 08′ S, 18° 12′ W at a depth of 2,584 m. A comprehensive investigation was made at the Romanche Deep. The result is given in a chart of the central part of the Deep (Fig. 16). The deepest sounding we obtained was 7,728 m at 0° 13′ S, 18° 26′ W.

Profile 20.

Romanche Gap — Station 355.
0° 58′ N, 18° 42′ W to 0° 38′ N, 37° 07′ W.
16th — 25th July 1948.
61 % of track covered.
Detail prof.: 14.
Phot. repr.: 8.
Station No. s: 343, 344, 345, 347, 349, 350, 351, 352, 354, 355.

This profile represents the most southerly of the three carried out over the Mid-Atlantic Ridge and the basins on each side. The western part contains the Brasilian Basin showing a level configuration with small variations of depth from the mean value of 4,500 m. From this basin an escarpment rises to a terrace with an average depth of 3,500 m. Because of an elevation an the edge of the terrace, the total difference of depth at the escarpment is 1,700 m. The swell from which the Mid-Atlantic Ridge rises seems to slope slowly to the east into the Sierra Leone Basin. The St. Paul Rocks rise isolated from about 4,000 m to the surface. To the west of them the mountain chain is broad and rugged. To the east, between the peaks, narrow plains were detected, the width of which can reach 60 km. A sea mount rises at 0° 30′ N, 25° 33′ W to 1,846 m. The Sierra Leone Basin shows a rough figuration with the deepest point at 1° 00′ N, 18° 40′ W at a depth of 5,466 m. We found the highest top there at 0° 51′ N, 30° 14′ W at a depth of 1,615 m, another was at 0° 46′ N, 30° 38′ W at 2,481 m.

Profile 21.

Station 355—St. Thomas.
0° 41′ N, 37° 12′ W to 17° 51′ N, 64° 03′ W.
25th July — 10th August 1948.
78 % of track covered.
Detail prof.: 24.
Phot. repr.: 24.
Station No. s: 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369.

The first part of this profile shows the St. Croix Deep a 4,500 deep trench-like deep in the Carribean Sea. Near Sombrero we crossed the ridge of the Antilles from where the sea floor drops rapidly 6,000 m in less than 10 km, the deepest scarp recorded during the whole expedition. In the Antilles Trench, which shows a rough configuration, depths between 5,600 m and 6,700 m were recorded. The deepest sounding was obtained at 19° 05′ N, 62° 43′ W where 6,741 m was recorded. To the south a mountain was crossed at a depth of 4,827 m at 17° 20′ N, 59° 00′ W and after a depression to 5,900 m a sea mount with a very steep northern flank was detected at 16° 41′ N, 58° 01′ W; the peak reaches 3,908 m. A plain follows at a depth of 5,500 m. The variation in depth is here about 50 m. A sea mount (4 230 m) at 13° 13′ N, 53° 21′ W separates the plain from a large and, towards the south, slowly rising plain with an extremely smooth surface. It extends over about 1,000 km and rises from 5,000 m to the highest point at 4,416 m. Over 100 km the depth does not change perceptibly. Only a small channel could

be detected here near 8° N. From about 6° N the bottom configuration becomes rugged and the depth varies between 3,500 and 4,500 m.

Profile 22.

St. Thomas—Station 386.
19° 01′ N, 64° 59′ W to 40° 31′ N, 38° 21′ W.
17th August — 6th September.
54 % of the track covered.
Detail prof.: 19.
Phot. repr.: 19.
Station No. s: 371, 373, 374, 375, 376, 379, 380, 381, 382, 383, 384, 385.

The major feature of this profile is the North American Basin including the Puerto Rico Trench. The general level of the sea floor rises from 6,000 m north of the Puerto Rico Trench to less than 5,000 m. The southern part is very level with a few hills, of which the highest rises about 500 m. A mountainous region starts at about 26° N and continues across practically the whole profile. It is interrupted over about 400 km by a plain at 5,600 m starting at 30° 22′ N, 56° 20′ W. The mountain region to the south-west of the plain rises to about 5,000 m and shows narrow and very deep, flat-bottomed valleys with depths down to 6,400 m. The mountainous region starts again at 32° 34′ N, 52° 16′ W with a sea mount rising to 4,014 m. Here, the base of the mountain chains is rising, as are the peaks. The highest peak was found at 35° 15′ N, 44° 02′ W; it had a flat top at 2,830 m and may be a Guyot. From here the depths obtained vary between 4,000 m and 5,000 m. The surface of the bottom is rugged. The last section of the profile is about parallel with the Mid-Atlantic Ridge.

Profile 23.

Station 386—England.
40° 31′ N, 38° 16′ W to 48° 33′ N, 10° 04′ W.
6th — 19th September.
67 % of the track covered.
Detail prof.: 10.
Phot. repr.: 14.
Station No. s: 386, 387, 388, 390, 391, 392, 394, 400.

The first section shows the approach to the Mid-Atlantic Ridge. The Ridge was crossed north of the Azores. The final part shows the extraordinarily rugged topography of the profile between the plateau of the Azores and the shelf of the British Isles. The approach to the Mid-Atlantic Ridge is level but rugged with a depth varying between 5,200 and 5,800 m with a great number of hills and knolls. The western slope of the ridge is of smoother configuration than the southern sections we took. The variation of depth is only about a few hundred metres. The top on the other hand is very rugged, showing variations of nearly 2,000 m. The eastern slope contains many knolls with small plains between them, which are not of the same depth. They resemble the terraces described by Ewing and Tolstoy. From 42° 45′ N, 20° 10′ W an area dominated by block faults starts. Steep scarps of more than 2,000 m rise abruptly. Two depressions were crossed, one at 42° 00′ N, 19° 52′ W with a depth of 5,331 only 8 km from a rise to 3,282 m; the other with 5,978 m at 43° 11′ N, 19° 41′ W in 5 km from a rise to 3,726 m. A *horst* was also found near these formations. The ruggedness of the bottom decreases and disappears in a plain at a depth of 4,700 to 4,800 m. On approaching the shelf the bottom configuration becomes rough again. On the base of the continental slope a sea mount was detected at 47° 58′ N, 12° 20′ W at a depth of 3,232 m. On the continental slope and the shelf features like canyons were detected.

## Observations of the Deep Scattering Layer

On many occasions we could detect echo marks from layers between the surface and the bottom. The marks were like those caused by fish and they were denoted on the recording paper as »fisk» the Swedish term for fish. The

TABLE 4.

*DSL-observations.*

| Date | Time | Date | Time | Remarks | Depth | Positions |
|---|---|---|---|---|---|---|
| 1947 | | | | | | |
| 20/7 | 0815 | 20/7 | 0900 | | 110—170 | 33° 50′ N 14° 12′ W stationary |
| 17/7 | 2035 | 17/7 | 2045 | | 80—130 | 40° 38′ N 9° 25′ W — 40° 39′ N 9° 26′ W |
| 30/7 | 2240 | 30/7 | 2255 | | 70—150 | 25° 59′ N 34° 51′ W — 25° 58′ N 34° 54′ W |
| 8/8 | 1515 | 8/8 | 1600 | | 240—270 | 16° 11′ N 58° 35′ W — 16° 08′ N 58° 39′ W |
| 15/8 | 2240 | 15/8 | 2250 | | ?—220 | 14° 10′ N 68° 59′ W — 14° 10′ N 69° 01′ W |
| 30/8 | 1545 | 30/8 | 1715 | | about 290 | 4° 58′ N 82° 03′ W — 4° 52′ N 82° 09′ W |
| 3/9 | 1055 | 3/9 | 1230 | | 180—200 | 0° 36′ N 87° 43′ W — 0° 30′ N 87° 49′ W |
| 8/9 | 2325 | 8/9 | 2400 | | 0— 90 | 2° 25′ S 92° 32′ W — 2° 21′ S 92° 30′ W |
| 20/9 | 2030 | 20/9 | 2110 | | 250—260 | 9° 38′ N 110° 21′ W — 9° 41′ N 110° 26′ W |
| 30/9 | 2000 | 30/9 | 2045 | | 200—220 | 12° 39′ N 127° 27′ W — 12° 33′ N 127° 28′ W |
| 30/9 | 2210 | 30/9 | 2211 | | 200—220 | 12° 32′ N 127° 28′ W |
| 1/10 | 1630 | 1/10 | 1800 | | 260—310 | 11° 06′ N 127° 50′ W — 10° 58′ N 127° 55′ W |
| 1/10 | 2230 | 2/10 | 0100 | | 200—260 | 10° 36′ N 128° 07′ W — 10° 24′ N 128° 14′ W |
| 3/10 | 2211 | 3/10 | 2300 | | 0—150 | 9° 54′ N 128° 43′ W — 9° 01′ N 128° 46′ W |
| 14/11 | 1453 | 14/11 | 1900 | | 0—110 | 0° 23′ S 151° 33′ W — 0° 19′ S 151° 31′ W |
| 25/11 | 1431 | 25/11 | 1800 | | 240—250 | 15° 13′ N 152° 50′ W — stationary |
| 25/11 | 1830 | 25/11 | 1900 | | 0—170 | 15° 13′ N 152° 50′ W — stationary |
| 26/12 | 1150 | | | station | 110—220 | 2° 37′ S 177° 43′ W |
| 1948 | | | | | | |
| 1/3 | 0046 | 1/3 | 0110 | | about 180 | 11° 25′ S 100° 31′ E — 11° 25′ S 100° 28′ E |
| 8/3 | 1827 | 8/3 | 2050 | | about 180 | 4° 36′ S 88° 17′ E — 4° 18′ S 88° 17′ E |
| 11/3 | 0709 | 11/3 | 0720 | | 170—180 | 0° 50′ N 88° 10′ E — 0° 53′ N 88° 09′ E |
| 30/3 | 0700 | 30/3 | 0710 | | 130—150 | 1° 02′ N 75° 32′ E — 1° 01′ N 75° 31′ E |
| 16/4 | 0802 | 16/4 | 1016 | | 370—460 | 3° 00′ S 55° 35′ E — 2° 49′ S 55° 35′ E |
| 16/4 | 1108 | 16/4 | 1207 | | 370—460 | 2° 46′ S 55° 35′ E — 2° 36′ S 55° 35′ E |
| 17/4 | 0700 | 17/4 | 1050 | spotty | 220—370 | 0° 48′ S 54° 47′ E — 0° 22′ S 54° 32′ E |
| 19/4 | | | | | 370—480 | 4° 29′ N 52° 46′ E |
| 20/4 | 1000 | | | | about 240—480 | 7° 54′ N 52° 49′ E |
| 23/4 | 0900 | 23/4 | 1407 | spotty | 220—460 | 10° 48′ N 52° 14′ E |
| 24/4 | 1000 | 24/4 | 1700 | | 270—380 | 12° 51′ N 49° 32′ E — 12° 52′ N 49° 22′ E |
| | | | | | | 12° 55′ N 49° 21′ E — 12° 48′ N 48° 47′ E |
| 24/4 | 2300 | 24/4 | 2400 | | 240—380 | 12° 39′ N 48° 26′ E — 12° 37′ N 48° 17′ E |
| 25/4 | 1700 | 25/4 | 1800 | | 220—290 | 12° 14′ N 45° 59′ E — 12° 13′ N 45° 48′ E |
| 26/4 | 0545 | 26/4 | 0900 | | 180—330 | 12° 04′ N 44° 34′ E — 12° 01′ N 44° 10′ E |
| 26/4 | 0900 | 26/4 | 1200 | | 260—370 | 12° 01′ N 44° 10′ E |
| 26/4 | 1745 | 26/4 | 1830 | | ?—370 | 12° 24′ N 43° 38′ E — 12° 27′ N 43° 33′ E |
| 26/4 | 2010 | 26/4 | 2100 | | about 90 | 12° 33′ N 43° 22′ E — 12° 32′ N 42° 17′ E |
| 27/4 | 0402 | 27/4 | 0600 | | 0—100 | Bab el Mandeb |
| 27/4 | 0610 | 27/4 | 0700 | | 80—110 | Bab el Mandeb |
| 25/5 | 2230 | 25/5 | 2300 | | 150—220 | 40° 22′ N 13° 30′ E — 40° 21′ N 13° 25′ E |
| 26/5 | 2115 | 27/5 | 0600 | spotty | 150—220 | 40° 18′ N 12° 14′ E — 41° 29′ N 10° 41′ E |
| 7/6 | 0700 | 7/6 | 0740 | | 240—380 | 37° 33′ N 1° 38′ E — 37° 30′ N 1° 33′ E |
| 26/6 | 0627 | 26/6 | 0850 | spotty | 200—270 | 17° 06′ N 23° 36′ W — 16° 59′ N 23° 57′ W |
| 1/7 | 1746 | 1/7 | 1834 | in schools | 180—270 | 13° 36′ N 25° 50′ W — 13° 30′ N 25° 52′ W |
| 2/7 | 1300 | | | in schools | about 150—200 | 11° 14′ N 26° 25′ W |
| 11/7 | 2150 | 11/7 | 2214 | | 240—270 | 1° 23′ N 18° 20′ W — 1° 20′ N 18° 18′ W |
| 12/7 | 2034 | 12/7 | 2110 | | 240—260 | 0° 07′ S 18° 13′ W — 0° 07′ S 18° 12′ W |
| 15/7 | 0720 | 15/7 | 0740 | | 180—290 | 0° 18′ S 18° 31′ W — 0° 17′ S 18° 30′ W |
| 15/7 | 1120 | 15/7 | 1140 | | 270—380 | 0° 18′ S 18° 24′ W — 0° 18′ S 18° 23′ W |
| 23/7 | 1700 | 23/7 | 1830 | rising to the surface | 0—270 | 0° 16′ N 33° 45′ W — |
| 23/7 | 1830 | 23/7 | 2330 | | 0—130 | 0° 16′ N 33° 45′ W |
| 24/7 | 1740 | 24/7 | 1840 | | 0—220 | 0° 04′ N 34° 39′ W — 0° 16′ N 35° 31′ W |
| 24/7 | 1840 | 25/7 | 0130 | | | 0° 04′ N 34° 39′ W — 0° 16′ N 35° 31′ W |
| 25/7 | 1810 | 25/7 | 1830 | | about 130 | 0° 48′ N 37° 20′ W — 0° 52′ N 37° 24′ W |

| Date | Time | Date | Time | Remarks | Depth | Position |
|---|---|---|---|---|---|---|
| 25/7 | 1830 | 25/7 | 1840 | | about 70 | 0° 48′ N 37° 20′ W — 0° 52′ N 37° 24′ W |
| 26/7 | 1620 | 26/7 | 1855 | rising | 270—? | 2° 14′ N 39° 10′ W — 2° 23′ N 39° 20′ W |
| 26/7 | 1855 | 27/7 | 0025 | | 0—160 | 2° 14′ N 39° 10′ W — 2° 23′ N 39° 20′ W |
| 27/7 | 1500 | 27/7 | 1540 | | about 270 | 2° 48′ N 39° 40′ W — 2° 52′ N 39° 45′ W |
| 27/7 | 1540 | 27/7 | 1600 | | 200—270 | 2° 48′ N 39° 40′ W — 2° 52′ N 39° 45′ W |
| 29/7 | 0413 | 29/7 | 0610 | | 0—150 | 6° 00′ N 43° 05′ W — 6° 17′ N 43° 20′ W |
| 29/7 | 0610 | 29/7 | 0730 | | 150—270 | 6° 00′ N 43° 05′ W — 6° 17′ N 43° 20′ W |
| 29/7 | 1750 | 29/7 | 1840 | | 0—180 | 6° 17′ N 43° 20′ W — 6° 42′ N 43° 54′ W |
| 29/7 | 1840 | 29/7 | 1900 | | 0—170 | 6° 17′ N 43° 20′ W — 6° 42′ N 43° 54′ W |
| 29/7 | 1900 | 29/7 | 2300 | | 0—130 | 6° 17′ N 43° 20′ W — 6° 42′ N 43° 54′ W |
| 30/7 | 1220 | 30/7 | 1240 | | about 90 | 8° 30′ N 45° 00′ W |
| 30/7 | 1450 | 30/7 | 1620 | shark | about 140 | 8° 30′ N 45° 00′ W |
| 8/8 | 1650 | 8/8 | 1800 | rising | 270—310 | 18° 32′ N 61° 03′ W — 18° 35′ N 61° 14′ W |
| 9/8 | 0605 | 9/8 | 0615 | | about 180 | 18° 47′ N 62° 57′ W — 18° 46′ N 62° 58′ W |
| 14/9 | 2353 | 14/9 | 2355 | | about 170 | 43° 34′ N 19° 00′ W |
| 19/9 | 1133 | 19/9 | 1158 | | 220—270 | 48° 27′ N 10° 22′ W — 48° 28′ N 10° 21′ W |

first time we observed it was in the vicinity of the Portuguese coast on 20th July 1947. The phenomenon is now generally known as the deep scattering layer. (Raitt 1948, Dietz 1948, Marshall 1951, Tucker 1951, Hersey & co-Workers 1952, Tschernia 1953.)

No special attention could be paid to the study and the detection of the D. S. L., as we were mainly interested in the investigation of the ocean floor. The sounding device, which only allowed the simultaneous observation of 25 per cent of the total water column, could not give more than a 1 to 3 chance of finding the D. S. L. on the same phasing range as the bottom was found. In our search for marks of the D. S. L. after our return, attention was only paid to strong marks, therefore the reported number of findings is certainly less then the recorded number, but their certainty is assured. Another factor was the cross noise caused by the outgoing signal, which covers the upper 20 to 30 fathoms and makes the detection of reverberation echoes in this region impossible.

The marks recorded show various patterns and may, therefore, be assumed to originate from different sources or to have been recorded under different conditions. The most common type of track was an even darkening of the recording paper spread over a depth of 20 to 50 meters at a constant level. Sometimes the marks were spotty and distributed in a horizontal direction, but they were mostly concentrated into a narrow, horizontal band. On other occasions both kinds of tracks were found simultaneously on the record.

Since we were generally working at constant paper speed, light marks could be easily detected on the HR recording only, as they were here close together and also longer than on the LR recording. The L. R. recordings were not used for the investigation.

The geographic distribution of the D. S. L., as given by our findings is shown in Table 4 and Figures 17 to 19. The D. S. L. was found in all oceans along our track. Near the continental slopes the occurrence of the D. S. L. seems to have increased as also the number of sound scatterers. But our observations only covered less than 25 per cent of the D. S. L. existing in the oceans, and are not suitable to draw proper conclusions. It may be possible that the D. S. L. exists along our total track but escaped discovery.

The depth at which the D. S. L. was found by our device (10 kc) varied between zero and 480 meters. Statistics of the depth distribution are given in Figure 20. The statistics are made according to depth classes of 50 meters. If the D. S. L. covered more than one depth class

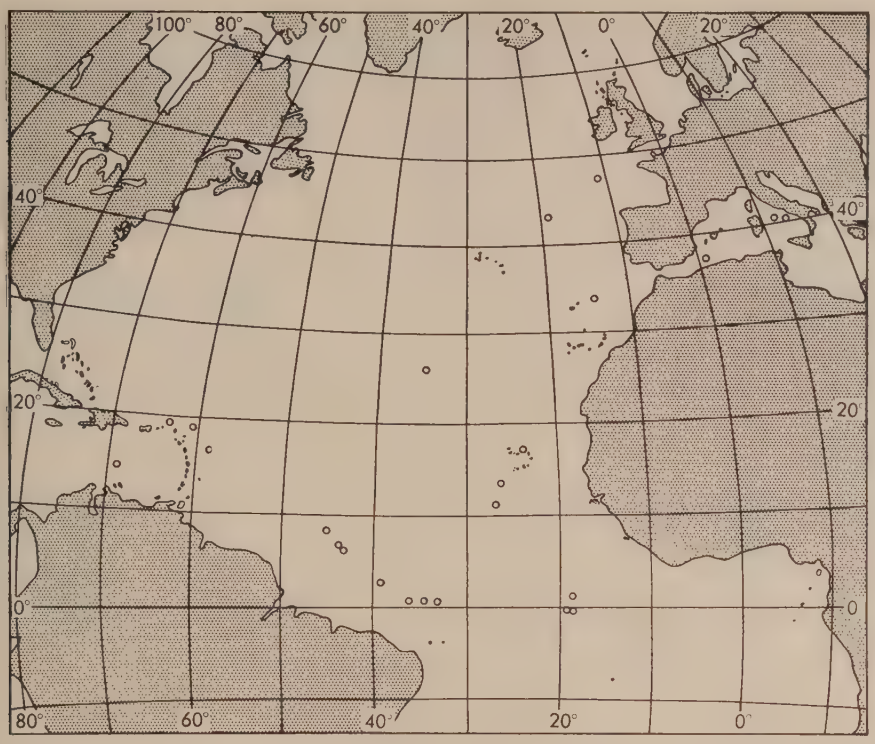


Fig. 18. Places where the Deep Scattering Layer in the Atlantic Ocean was recorded.

it was counted as many times as it touched the depth classes. The difference between night and day distribution is evident. During day-time the layer seems to be around 250 meters. The same depth shows also a minor maximum during night-time but in most of our night observations the depth down to 100 m seems mainly to be populated by the scatterers. The surface observations are under-represented as the cross noise covers the echo marks of the D. S. L. which, therefore, could not always be recognized. The investigations of HERSEY and co-WORKERS have shown that each type of sound scatterer responds to a certain sound frequency. Hence our device working at 10 kc can only respond to a part of the scatterers existing in the sea.

The behavior of the D. S. L. during sunset and sunrise could be studied on a few occasions. Generally the main part of the D. S. L.

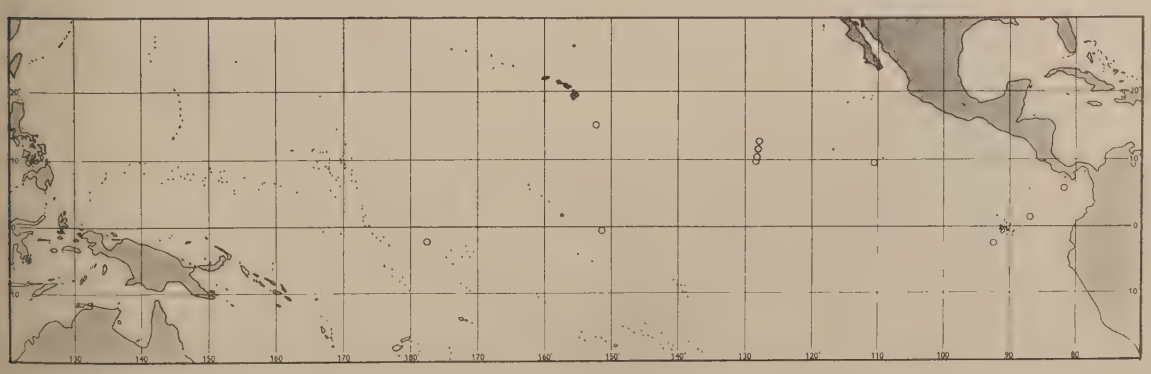

Fig. 19. Places in the Pacific Ocean where the Deep Scattering Layer was recorded.

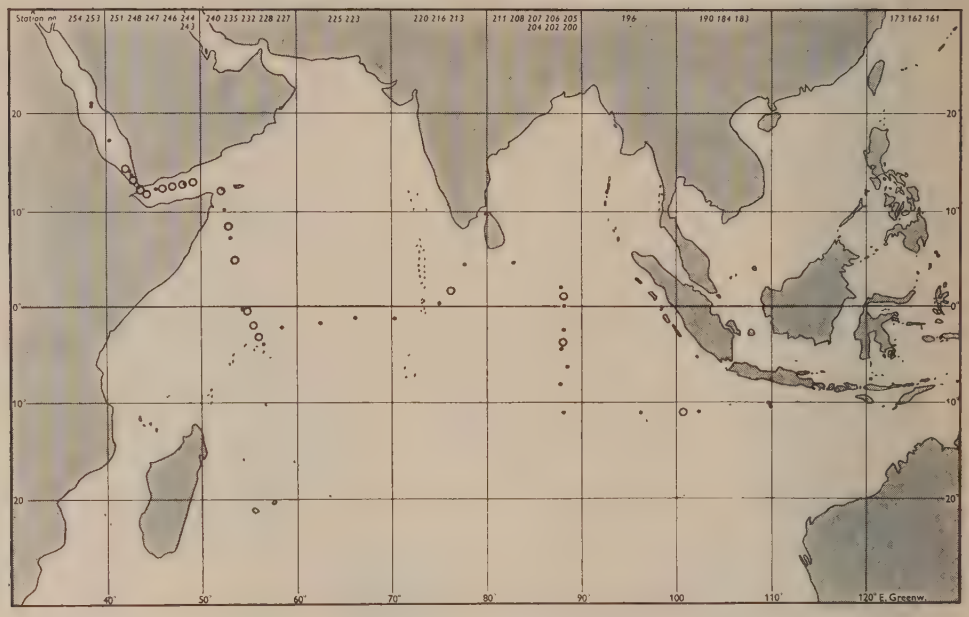


Fig. 20. Places in the Indian Ocean where the Deep Scattering Layer was recorded.

spread over 50 to 100 meters becomes denser at sunset and rises to the surface. Sometimes the diffuse layer is split into two or three distinct layers, which rise one after the other. The movement is rather rapid and on two occasions measurements showed it to be about 10 to 15 cm per second. But at some places the D. S. L. stays in midwater at the same depth or at a somewhat higher one during the night, too.

It is now generally assumed that the D. S. L. consists of organisms (Tschernia, Ritchie a. o.) The investigations of Hersey and co-workers show also that the sound scatterers exist at nearly all depths down to 800 meters, even if they produce a strong echo only when an adequate sound-frequency is used. The reason for that may be the size of the scatterers and their acoustic impedance ratio and their distribution according to density and depth. As a sharp frequency band is generally used and the receiver-amplifier system is tuned to this frequency, only a small part of the scatterer is recorded.

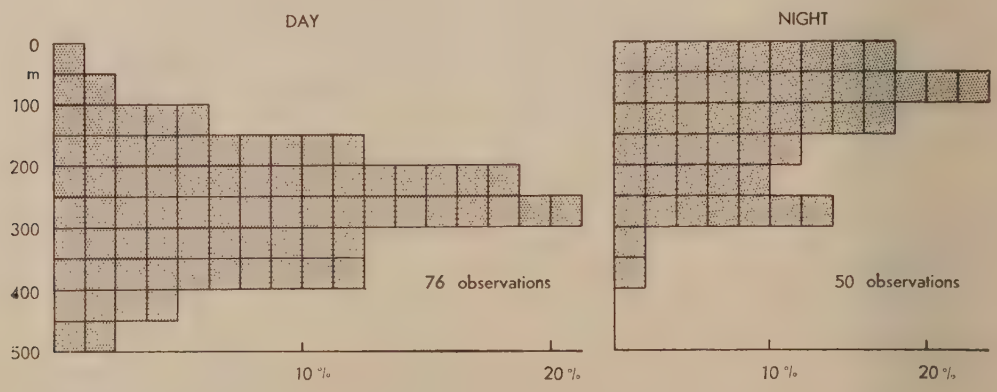


Fig. 21. Statistical distribution of the depth at which the Deep Scattering Layer was recorded at night and at day-time.

The vertical movement when the light intensity changes may be due to the phototaxis of the organisms. This phenomenon is often observed. Copepods in particular are known to move towards the surface at sunset (negative phototaxis), but herrings, too, move to the surface at sunset. It is not yet clearly understood if fishes are directly affected by changes in the intensity of light or if they are just following their food. It seems obvious, however, that if one link in the food chain, especially if it is a primary one, moves, all animals depending upon it will follow. That would explain that two — or more — distinct layers move one after the other. The statistics of our observations show, that not all are moving. The richness of copepods and squids in the surface during night-time points to the assumption that these two groups of animals participate in the vertical movement.

Our attempts to catch some of the organisms did not lead to any result, mainly because we were not sufficiently equipped with midwater trawls and nets. On one occasion in the Panama Bay, a 1—m plancton net burst when it was used to catch some of the organisms. Presumably it was very soon filled with medusae of which rests could be found in the burst net.

The observations on the D. S. L. obtained from the Albatross cannot be generalized, but they may serve as a further contribution to the investigation of the deep scattering layer, which certainly is one of the most puzzling but also important phenomena in the oceans.

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# TABLE OF SOUNDINGS
# SELECTED FROM THE ECHOGRAMS

Bolt letters denote extrem values for each profile.

Italics denote deviations from the minuts of

the Bathymetric Chart of the International Hydrographic Office, Monaco.

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| PROFILE 1. | | |
| 41° 01′ N | 8° 52′ W | 46 |
| 40° 57′ N | 8° 56′ W | 68 |
| 40° 57′ N | 8° 56′ W | 159 |
| 40° 52′ N | 9° 02′ W | 103 |
| 40° 54′ N | 8° 58′ W | 99 |
| 40° 54′ N | 8° 58′ W | 221 |
| 40° 44′ N | 9° 10′ W | 148 |
| 40° 38′ N | 9° 16′ W | 844 |
| 40° 37′ N | 9° 17′ W | 1,265 |
| 40° 36′ N | 9° 18′ W | 954 |
| 40° 34′ N | 9° 20′ W | 1,274 |
| 40° 30′ N | 9° 25′ W | 176 |
| 40° 28′ N | 9° 27′ W | 194 |
| 40° 24′ N | 9° 31′ W | 254 |
| 39° 12′ N | 10° 50′ W | 3,729 |
| 39° 12′ N | 10° 51′ W | 3,822 |
| 39° 11′ N | 10° 52′ W | 3,880 |
| 39° 10′ N | 10° 54′ W | 4,000 |
| 39° 09′ N | 10° 55′ W | 4,083 |
| 39° 07′ N | 10° 57′ W | 4,279 |
| 39° 06′ N | 10° 58′ W | 4,410 |
| 38° 59′ N | 11° 10′ W | 4,083 |
| 38° 54′ N | 11° 16′ W | 3,580 |
| 38° 43′ N | 11° 24′ W | 4,241 |
| 38° 41′ N | 11° 27′ W | 4,279 |
| 38° 40′ N | 11° 29′ W | 4,315 |
| 38° 37′ N | 11° 33′ W | 4,102 |
| 38° 36′ N | 11° 33′ W | *5,002* |
| 38° 30′ N | 11° 42′ W | 4,860 |
| 38° 30′ N | 11° 42′ W | 4,855 |
| 38° 30′ N | 11° 42′ W | 4,907 |
| 38° 29′ N | 11° 42′ W | 4,926 |
| 38° 28′ N | 11° 45′ W | 4,962 |
| 38° 27′ N | 11° 46′ W | 4,982 |
| 38° 25′ N | 11° 47′ W | 5,001 |
| 38° 21′ N | 11° 50′ W | **5,048** |
| 36° 34′ N | 13° 20′ W | 3,314 |
| 36° 28′ N | 13° 23′ W | 3,609 |
| 36° 22′ N | 13° 25′ W | 4,025 |
| 36° 15′ N | 13° 27′ W | 4,400 |
| 34° 56′ N | 13° 54′ W | 4,139 |
| 34° 47′ N | 13° 56′ W | 4,040 |
| 34° 02′ N | 14° 08′ W | 4,270 |
| 33° 59′ N | 14° 08′ W | 4,092 |
| 33° 57′ N | 14° 08′ W | 3,551 |
| 33° 57′ N | 14° 08′ W | 3,479 |
| 33° 53′ N | 14° 08′ W | 2,897 |
| 33° 45′ N | 14° 10′ W | 1,484 |
| 33° 40′ N | 14° 11′ W | 789 |
| 33° 45′ N | 14° 20′ W | **172** |
| 33° 41′ N | 14° 29′ W | 1,595 |
| 33° 37′ N | 14° 35′ W | 2,125 |
| 33° 36′ N | 14° 40′ W | *4,053* |
| 33° 32′ N | 14° 46′ W | *4,003* |
| 33° 29′ N | 14° 56′ W | 3,892 |
| 33° 26′ N | 15° 03′ W | 3,804 |
| 33° 25′ N | 15° 04′ W | 3,813 |
| 33° 25′ N | 15° 04′ W | 3,897 |
| 33° 25′ N | 15° 04′ W | 3,777 |
| 33° 22′ N | 15° 10′ W | 3,712 |
| 33° 21′ N | 15° 12′ W | 3,804 |
| 33° 20′ N | 15° 15′ W | 3,866 |
| 33° 19′ N | 15° 16′ W | 3,844 |
| 33° 17′ N | 15° 22′ W | 3,908 |
| 33° 14′ N | 15° 30′ W | 3,994 |
| 33° 09′ N | 15° 40′ W | 3,939 |
| 32° 53′ N | 16° 16′ W | 3,007 |
| 32° 53′ N | 16° 17′ W | 2,146 |
| 32° 52′ N | 16° 20′ W | 382 |
| PROFILE 2. | | |
| 32° 09′ N | 19° 01′ W | 4,496 |
| 32° 08′ N | 19° 05′ W | 4,294 |
| 32° 06′ N | 19° 11′ W | 4,077 |
| 32° 06′ N | 19° 12′ W | 4,171 |
| 32° 05′ N | 19° 18′ W | 4,065 |
| 32° 04′ N | 19° 22′ W | 4,064 |
| 32° 05′ N | 19° 21′ W | 4,055 |
| 32° 04′ N | 19° 22′ W | 4,007 |
| 32° 03′ N | 19° 31′ W | 4,027 |
| 32° 02′ N | 19° 31′ W | 4,004 |
| 32° 01′ N | 19° 34′ W | 4,050 |
| 31° 59′ N | 19° 42′ W | 4,102 |
| 31° 32′ N | 23° 11′ W | 5,403 |
| 31° 32′ N | 23° 12′ W | 5,397 |
| 31° 29′ N | 23° 19′ W | 5,403 |
| 31° 26′ N | 23° 26′ W | 5,397 |
| 31° 24′ N | 23° 32′ W | 5,395 |
| 31° 23′ N | 23° 37′ W | 5,470 |
| 31° 22′ N | 23° 42′ W | 5,432 |
| 31° 18′ N | 23° 54′ W | 5,444 |
| 31° 02′ N | 24° 53′ W | 5,483 |
| 30° 57′ N | 24° 58′ W | 5,415 |
| 30° 57′ N | 25° 03′ W | 5,061 |
| 30° 57′ N | 25° 09′ W | 5,502 |
| 30° 57′ N | 25° 11′ W | 5,424 |
| 30° 57′ N | 25° 11′ W | 5,455 |
| 30° 57′ N | 25° 13′ W | 5,464 |
| 30° 57′ N | 25° 15′ W | 5,483 |
| 30° 57′ N | 25° 15′ W | 5,424 |
| 30° 57′ N | 25° 18′ W | 5,303 |
| 30° 55′ N | 25° 19′ W | 5,254 |
| 30° 55′ N | 25° 19′ W | 5,333 |
| 30° 53′ N | 25° 26′ W | 5,031 |
| 30° 51′ N | 25° 29′ W | 5,348 |
| 30° 48′ N | 25° 34′ W | 5,209 |
| 30° 10′ N | 26° 46′ W | 4,731 |
| 29° 55′ N | 27° 10′ W | 5,005 |
| 29° 53′ N | 27° 14′ W | 4,882 |
| 29° 50′ N | 27° 18′ W | 4,884 |
| 29° 44′ N | 27° 28′ W | 4,967 |
| 29° 40′ N | 27° 35′ W | 4,760 |
| 29° 32′ N | 27° 49′ W | 4,445 |
| 29° 28′ N | 27° 56′ W | 4,469 |
| 29° 25′ N | 28° 00′ W | 4,645 |
| 29° 22′ N | 28° 05′ W | 4,494 |
| 29° 21′ N | 28° 06′ W | 4,635 |
| 29° 17′ N | 28° 15′ W | 4,370 |
| 29° 12′ N | 28° 24′ W | 4,673 |
| 29° 06′ N | 28° 34′ W | 4,616 |
| 29° 01′ N | 28° 42′ W | 4,708 |
| 28° 56′ N | 28° 51′ W | 4,738 |
| 28° 53′ N | 28° 56′ W | 4,827 |
| 28° 10′ N | 30° 09′ W | 4,860 |
| 28° 05′ N | 30° 20′ W | 5,175 |
| 27° 59′ N | 30° 31′ W | 4,860 |
| 27° 55′ N | 30° 38′ W | 5,140 |
| 27° 55′ N | 30° 38′ W | 5,478 |
| 27° 50′ N | 30° 48′ W | 5,157 |
| 27° 47′ N | 30° 54′ W | 4,428 |
| 27° 44′ N | 30° 58′ W | 5,364 |
| 27° 37′ N | 31° 08′ W | 4,935 |
| 27° 33′ N | 31° 16′ W | 5,175 |
| 27° 31′ N | 31° 20′ W | 4,560 |
| 27° 29′ N | 31° 22′ W | 5,140 |
| 27° 28′ N | 31° 24′ W | 5,269 |
| 27° 24′ N | 31° 33′ W | 5,250 |
| 27° 20′ N | 31° 44′ W | 5,103 |
| 27° 16′ N | 31° 54′ W | 5,582 |
| 27° 12′ N | 32° 03′ W | 5,582 |
| 26° 30′ N | 33° 33′ W | 5,535 |
| 26° 26′ N | 33° 40′ W | 5,896 |
| 26° 25′ N | 33° 42′ W | 5,326 |
| 26° 25′ N | 33° 43′ W | 5,801 |
| 26° 24′ N | 33° 44′ W | 5,317 |
| 26° 22′ N | 33° 48′ W | 5,649 |
| 26° 25′ N | 34° 00′ W | 5,157 |
| 26° 24′ N | 34° 04′ W | 5,688 |
| 26° 23′ N | 34° 06′ W | 5,877 |
| 26° 20′ N | 34° 10′ W | 5,782 |
| 26° 18′ N | 34° 15′ W | 5,857 |
| 26° 13′ N | 34° 25′ W | 5,545 |
| 26° 09′ N | 34° 33′ W | 5,800 |
| 26° 07′ N | 34° 36′ W | *4,973* |
| 26° 04′ N | 34° 42′ W | 5,791 |
| 26° 03′ N | 34° 43′ W | 5,944 |
| 26° 01′ N | 34° 48′ W | *6,010* |
| 26° 00′ N | 34° 50′ W | 5,326 |
| 25° 59′ N | 34° 51′ W | 5,734 |
| 25° 56′ N | 34° 58′ W | 5,439 |
| 25° 25′ N | 35° 59′ W | 5,829 |
| 25° 22′ N | 36° 06′ W | 5,364 |
| 25° 21′ N | 36° 10′ W | *6,048* |
| 25° 19′ N | 36° 13′ W | 5,811 |
| 25° 09′ N | 36° 21′ W | **6,407** |
| 25° 07′ N | 36° 23′ W | 6,313 |
| 25° 06′ N | 36° 31′ W | *6,010* |
| 25° 03′ N | 36° 37′ W | 5,325 |
| 24° 59′ N | 36° 46′ W | 5,382 |
| 24° 56′ N | 36° 53′ W | 4,503 |
| 24° 55′ N | 36° 55′ W | 5,167 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 24° 55′ N | 36° 56′ W | 5,048 |
| 24° 52′ N | 37° 02′ W | 4,560 |
| 24° 51′ N | 37° 05′ W | 4,897 |
| 24° 44′ N | 37° 21′ W | 5,122 |
| 24° 43′ N | 37° 22′ W | 4,654 |
| 24° 42′ N | 37° 23′ W | 5,366 |
| 24° 39′ N | 37° 33′ W | 4,794 |
| 24° 38′ N | 37° 35′ W | 5,140 |
| 24° 32′ N | 37° 46′ W | 5,250 |
| 24° 31′ N | 37° 48′ W | 4,850 |
| 24° 29′ N | 37° 52′ W | 5,688 |
| 24° 24′ N | 37° 59′ W | 5,307 |
| 24° 20′ N | 38° 12′ W | 5,945 |
| 24° 17′ N | 38° 18′ W | 5,001 |
| 24° 16′ N | 38° 22′ W | 5,641 |
| 24° 11′ N | 38° 31′ W | 5,055 |
| 24° 10′ N | 38° 34′ W | 5,055 |
| 24° 08′ N | 38° 38′ W | 5,319 |
| 24° 07′ N | 38° 41′ W | 4,410 |
| 24° 06′ N | 38° 44′ W | 5,075 |
| 23° 57′ N | 38° 56′ W | 4,622 |
| 23° 56′ N | 38° 57′ W | 5,075 |
| 23° 55′ N | 39° 00′ W | 4,982 |
| 23° 55′ N | 39° 00′ W | 5,508 |
| 23° 54′ N | 39° 04′ W | 5,168 |
| 23° 53′ N | 39° 05′ W | 5,490 |
| 23° 50′ N | 39° 10′ W | 5,375 |
| 23° 49′ N | 39° 13′ W | 5,300 |
| 23° 47′ N | 39° 16′ W | 5,652 |
| 23° 45′ N | 39° 21′ W | 4,115 |
| 23° 44′ N | 39° 24′ W | 4.856 |
| 23° 43′ N | 39° 28′ W | 5,509 |
| 23° 37′ N | 39° 39′ W | 4,766 |
| 23° 35′ N | 39° 45′ W | 4,551 |
| 23° 33′ N | 39° 49′ W | 5,205 |
| 23° 27′ N | 40° 02′ W | 5,357 |
| 23° 25′ N | 40° 07′ W | 4,419 |
| 23° 23′ N | 40° 14′ W | 5,319 |
| 23° 18′ N | 40° 23′ W | 4,888 |
| 23° 11′ N | 40° 39′ W | 5,394 |
| 23° 05′ N | 40° 53′ W | 4,195 |
| 23° 03′ N | 40° 58′ W | 5,075 |
| 22° 52′ N | 41° 18′ W | *5,981* |
| 22° 48′ N | 41° 26′ W | *6,015* |
| 22° 48′ N | 41° 26′ W | *5,768* |
| 22° 48′ N | 41° 26′ W | *5,945* |
| 22° 49′ N | 41° 34′ W | 4,850 |
| 22° 49′ N | 41° 35′ W | *5,114* |
| 22° 48′ N | 41° 52′ W | 4,569 |
| 22° 48′ N | 42° 08′ W | 4,457 |
| 22° 48′ N | 42° 14′ W | 4,569 |
| 22° 48′ N | 42° 36′ W | 4,794 |
| 22° 48′ N | 42° 36′ W | 4,850 |
| 22° 48′ N | 42° 41′ W | 3,813 |
| 22° 48′ N | 42° 43′ W | 4,589 |
| 22° 48′ N | 42° 51′ W | 3,431 |
| 22° 49′ N | 42° 55′ W | 4,270 |
| 22° 49′ N | 43° 03′ W | 4,626 |
| 22° 49′ N | 43° 16′ W | 4,214 |
| 22° 49′ N | 43° 25′ W | 3,906 |
| 22° 49′ N | 43° 40′ W | 3,743 |
| 22° 49′ N | 43° 57′ W | 3,891 |
| 22° 49′ N | 44° 07′ W | 3,040 |
| 22° 50′ N | 44° 14′ W | 3,854 |
| 22° 52′ N | 44° 35′ W | 3,317 |
| 22° 53′ N | 44° 37′ W | *2,736* |
| 22° 54′ N | 44° 39′ W | 3,280 |
| 22° 54′ N | 44° 43′ W | *2,745* |
| 22° 55′ N | 44° 46′ W | *2,994* |
| 22° 56′ N | 44° 50′ W | 3,566 |
| 22° 57′ N | 44° 55′ W | 2,930 |
| 23° 00′ N | 45° 01′ W | 1,755 |
| 23° 00′ N | 45° 05′ W | *1,939* |
| 23° 00′ N | 45° 05′ W | 2,451 |
| 23° 00′ N | 45° 45′ W | **1,429** |
| 23° 00′ N | 45° 05′ W | *1,574* |
| 22° 59′ N | 45° 05′ W | *1,674* |
| 22° 48′ N | 45° 11′ W | *2,469* |
| 22° 39′ N | 45° 16′ W | *2,405* |
| 22° 31′ N | 45° 20′ W | *2,929* |
| 22° 24′ N | 45° 23′ W | 3,132 |
| 22° 22′ N | 45° 29′ W | *2,561* |
| 22° 15′ N | 45° 33′ W | 3,687 |
| 22° 08′ N | 45° 40′ W | 3,040 |
| 22° 02′ N | 45° 47′ W | *2,240* |
| 21° 55′ N | 45° 52′ W | 4,152 |
| 21° 45′ N | 46° 03′ W | 3,705 |
| 21° 36′ N | 46° 13′ W | *2,634* |
| 21° 32′ N | 46° 16′ W | 3,245 |
| 21° 28′ N | 46° 20′ W | *2,915* |
| 21° 24′ N | 46° 23′ W | 3,357 |
| 21° 24′ N | 46° 23′ W | 3,154 |
| 21° 23′ N | 46° 24′ W | 3,506 |
| 21° 22′ N | 46° 28′ W | 3,099 |
| 21° 20′ N | 46′ 32′ W | 3,450 |
| 21° 17′ N | 46° 41′ W | 3,901 |
| 21° 13′ N | 46° 50′ W | 3,151 |
| 21° 07′ N | 47° 01′ W | 3,724 |
| 21° 01′ N | 47° 16′ W | 4,565 |
| 21° 00′ N | 47° 19′ W | 4,129 |
| 20° 56′ N | 47° 27′ W | 4,691 |
| 20° 52′ N | 47° 35′ W | *3,156* |
| 20° 49′ N | 47° 44′ W | *3,999* |
| 20° 42′ N | 47° 57′ W | 4,302 |
| 20° 38′ N | 48° 06′ W | *3,869* |
| 20° 34′ N | 48° 14′ W | 4,279 |
| 20° 29′ N | 48° 26′ W | 4,260 |
| 20° 28′ N | 48° 30′ W | 4,223 |
| 20° 27′ N | 48° 31′ W | *3,842* |
| 20° 25′ N | 48° 38′ W | 4,270 |
| 20° 20′ N | 48° 41′ W | 4,299 |
| 20° 07′ N | 49° 06′ W | 4,242 |
| 20° 03′ N | 49° 14′ W | 4,260 |
| 20° 01′ N | 49° 21′ W | 4,500 |
| 19° 57′ N | 49° 31′ W | 4,179 |
| 13° 54′ N | 49° 36′ W | 4,799 |
| 19° 50′ N | 49° 45′ W | 4,045 |
| 19° 38′ N | 50° 14′ W | 4,725 |
| 19° 36′ N | 50° 17′ W | 4,463 |
| 19° 35′ N | 50° 19′ W | 4,884 |
| 19 32′ N | 50° 26′ W | 4,289 |
| 19° 31′ N | 50° 28′ W | 4,756 |
| 19° 29′ N | 50° 32′ W | 5,200 |
| 19° 28′ N | 50° 34′ W | 5,360 |
| 19° 25′ N | 50° 40′ W | 5,069 |
| 19° 17′ N | 51° 01′ W | 5,209 |
| 19° 13′ N | 51° 10′ W | *4,803* |
| 19° 10′ N | 51° 18′ W | *4,644* |
| 19° 07′ N | 51° 24′ W | *4,120* |
| 19° 05′ N | 51° 29′ W | *4,904* |
| 18° 48′ N | 52° 03′ W | *4,904* |
| 18° 45′ N | 52° 11′ W | 5,148 |
| 18° 39′ N | 52° 23′ W | *4,808* |
| 18° 35′ N | 52° 33′ W | *4,660* |
| 18° 32′ N | 52° 39′ W | 5,279 |
| 18° 27′ N | 52° 48′ W | 5,466 |
| 18° 28′ N | 52° 48′ W | 5,485 |
| 18° 26′ N | 52° 50′ W | *4,664* |
| 18° 24′ N | 52° 56′ W | 5,152 |
| 18° 22′ N | 52° 48′ W | 5,161 |
| 18° 20′ N | 52° 53′ W | *5,324* |
| 18° 19′ N | 52° 55′ W | *4,468* |
| 18° 19′ N | 52° 56′ W | *4,876* |
| 18° 18′ N | 52° 58′ W | *4,262* |
| 18° 18′ N | 53° 00′ W | *4,553* |
| 18° 17′ N | 53° 04′ W | *4,669* |
| 18° 13′ N | 53° 13′ W | *4,465* |
| 18° 13′ N | 53° 14′ W | *4,792* |
| 18° 10′ N | 53° 20′ W | *4,050* |
| 17° 48′ N | 54° 20′ W | 5,534 |
| 17° 46′ N | 54° 26′ W | *4,738* |
| 17° 44′ N | 54° 31′ W | 5,490 |
| 17° 40′ N | 54° 42′ W | *4,743* |
| 17° 37′ N | 54° 50′ W | *4,947* |
| 17° 29′ N | 55° 16′ W | *4,938* |
| 17° 28′ N | 55° 18′ W | 5,201 |
| 17° 27′ N | 55° 22′ W | *4,788* |
| 17° 21′ N | 55° 36′ W | 5,330 |
| 17° 18′ N | 55° 43′ W | 5,126 |
| 17° 16′ N | 55° 50′ W | 5,358 |
| 17° 09′ N | 56° 10′ W | 5,539 |
| 17° 06′ N | 56° 18′ W | 5,700 |
| 17° 06′ N | 56° 18′ W | 5,698 |
| 17° 04′ N | 56° 23′ W | 5,042 |
| 17° 01′ N | 56° 29′ W | 5,793 |
| 17° 00′′N | 56° 32′ W | 5,642 |
| 16° 46′ N | 57° 11′ W | 5,923 |
| 16° 44′ N | 57° 14′ W | 5,873 |
| 16° 39′ N | 57° 27′ W | 5,854 |
| 16° 33′ N | 57° 44′ W | *4,345* |
| 16° 21′ N | 58° 15′ W | 5,645 |
| 16° 15′ N | 58° 26′ W | 5,588 |
| 16° 15′ N | 58° 26′ W | 5,598 |
| 16° 07′ N | 58° 41′ W | 5,750 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 16° 02′ N | 58° 51′ W | 5,435 |
| 15° 59′ N | 58° 59′ W | 5,114 |
| 15° 55′ N | 59° 04′ W | 5,142 |
| 15° 36′ N | 59° 42′ W | 3,813 |
| 15° 33′ N | 59° 48′ W | 4,272 |
| 15° 28′ N | 59° 56′ W | *5,207* |
| 15° 19′ N | 60° 15′ W | 3,721 |
| 15° 15′ N | 60° 22′ W | 3,337 |
| 15° 10′ N | 60° 32′ W | 2,496 |
| 15° 06′ N | 60° 40′ W | 1,177 |
| 15° 04′ N | 60° 44′ W | 663 |
| PROFILE 3. | | |
| 14° 45′ N | 61° 09′ W | 2,239 |
| 14° 48′ N | 61° 16′ W | 2,682 |
| 14° 53′ N | 61° 36′ W | 2,748 |
| 14° 53′ N | 61° 49′ W | 2,813 |
| 14° 53′ N | 61° 58′ W | 2,822 |
| 14° 53′ N | 62° 05′ W | 2,869 |
| 14° 53′ N | 62° 17′ W | 2,889 |
| 14° 53′ N | 63° 01′ W | 1,616 |
| 14° 53′ N | 63° 18′ W | 1,632 |
| 14° 53′ N | 63° 29′ W | 1,587 |
| 14° 53′ N | 63° 38′ W | 1,568 |
| 14° 54′ N | 63° 45′ W | 1,605 |
| 14° 54′ N | 63° 49′ W | **1,495** |
| 14° 54′ N | 64° 01′ W | 2,648 |
| 14° 54′ N | 63° 56′ W | 2,837 |
| 14° 51′ N | 64° 06′ W | 3,318 |
| 14° 49′ N | 64° 14′ W | 3,468 |
| 14° 46′ N | 64° 28′ W | 3,678 |
| 14° 40′ N | 64° 50′ W | 3,975 |
| 14° 38′ N | 65° 02′ W | 4,095 |
| 14° 37′ N | 65° 08′ W | 4,118 |
| 14° 36′ N | 65° 14′ W | 4,540 |
| 14° 30′ N | 65° 40′ W | 4,935 |
| 14° 29′ N | 65° 41′ W | 4,887 |
| 14° 28′ N | 65° 50′ W | 4,907 |
| 14° 25′ N | 65° 55′ W | 4,960 |
| 14° 22′ N | 66° 09′ W | 5,062 |
| 14° 18′ N | 66° 25′ W | 5,119 |
| 14° 18′ N | 66° 25′ W | 5,100 |
| 14° 18′ N | 66° 30′ W | 5,100 |
| 14° 15′ N | 66° 58′ W | 5,119 |
| 14° 15′ N | 67° 04′ W | 5,110 |
| 14° 12′ N | 67° 45′ W | *5,114* |
| 14° 10′ N | 68° 08′ W | *5,104* |
| 14° 10′ N | 68° 12′ W | *5,085* |
| 14° 10′ N | 68° 18′ W | **5,123** |
| 14° 10′ N | 68° 28′ W | 4,831 |
| 14° 10′ N | 68° 37′ W | 4,699 |
| 14° 10′ N | 68° 41′ W | 4,719 |
| 14° 10′ N | 68° 45′ W | 4,690 |
| 14° 10′ N | 68° 57′ W | 4,826 |
| 14° 10′ N | 69° 02′ W | 4,899 |
| 14° 10′ N | 69° 24′ W | 4,728 |
| 14° 10′ N | 69° 34′ W | 4,528 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 14° 10′ N | 69° 43′ W | 4,325 |
| 14° 10′ N | 70° 08′ W | *3,941* |
| 14° 10′ N | 70° 18′ W | *3,730* |
| 14° 10′ N | 70° 21′ W | *3,656* |
| 14° 15′ N | 70° 41′ W | *3,385* |
| 14° 15′ N | 70° 48′ W | *3,777* |
| 14° 15′ N | 70° 55′ W | *3,750* |
| 14° 14′ N | 71° 03′ W | 4,078 |
| 14° 10′ N | 71° 40′ W | *3,985* |
| 14° 10′ N | 71° 42′ W | 4,071 |
| 14° 08′ N | 71° 34′ W | *3,359* |
| 14° 05′ N | 71° 44′ W | *3,350* |
| 14° 02′ N | 71° 54′ W | *3,504* |
| 14° 00′ N | 72° 07′ W | *3,858* |
| 13° 58′ N | 72° 12′ W | *3,728* |
| 13° 56′ N | 72° 20′ W | *3,833* |
| 13° 47′ N | 73° 02′ W | 4,133 |
| 13° 45′ N | 73° 12′ W | 4,094 |
| 13° 43′ N | 73° 22′ W | 4,071 |
| 13° 42′ N | 73° 24′ W | 4,053 |
| 13° 40′ N | 73° 32′ W | 4,035 |
| 13° 37′ N | 73° 49′ W | 4,030 |
| 13° 35′ N | 73° 55′ W | 4,030 |
| 13° 34′ N | 74° 05′ W | 4,049 |
| 13° 32′ N | 74° 15′ W | 4,044 |
| 13° 30′ N | 74° 25′ W | 4,044 |
| 13° 29′ N | 74° 34′ W | 4,044 |
| 13° 24′ N | 75° 06′ W | 3,983 |
| 13° 22′ N | 75° 16′ W | 3,980 |
| 13° 18′ N | 75° 40′ W | 3,986 |
| 13° 16′ N | 75° 50′ W | 3,949 |
| 13° 14′ N | 76° 01′ W | 3,949 |
| 13° 10′ N | 76° 28′ W | 3,951 |
| 13° 07′ N | 76° 43′ W | 3,949 |
| 13° 05′ N | 76° 54′ W | 3,938 |
| 13° 05′ N | 76° 56′ W | 3,972 |
| 12° 55′ N | 77° 11′ W | 3,921 |
| 12° 49′ N | 77° 20′ W | 3,909 |
| 12° 41′ N | 77° 29′ W | 3,886 |
| 12° 34′ N | 77° 36′ W | 3,884 |
| 12° 27′ N | 77° 43′ W | 3,848 |
| 12° 20′ N | 77° 50′ W | 3,793 |
| 12° 13′ N | 77° 58′ W | 3,765 |
| 11° 36′ N | 78° 34′ W | 3,581 |
| 11° 34′ N | 78° 36′ W | 3,549 |
| 11° 32′ N | 78° 38′ W | 3,581 |
| 11° 23′ N | 78° 43′ W | 3,549 |
| 11° 20′ N | 78° 45′ W | 3,549 |
| 11° 09′ N | 78° 52′ W | 3,539 |
| 11° 02′ N | 78° 56′ W | 3,549 |
| 10° 48′ N | 79° 04′ W | 3,549 |
| PROFILE 4. | | |
| 7° 15′ N | 78° 46′ W | 2,143 |
| 7° 13′ N | 78° 43′ W | 2,698 |
| 7° 11′ N | 78° 44′ W | 3,047 |
| 7° 08′ N | 78° 45′ W | 3,084 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 7° 06′ N | 78° 46′ W | 2,756 |
| 6° 57′ N | 78° 52′ W | 2,866 |
| 6° 53′ N | 79° 01′ W | 2,866 |
| 6° 23′ N | 80° 00′ W | 3,269 |
| 6° 19′ N | 80° 08′ W | 3,129 |
| 6° 15′ N | 80° 15′ W | 2,991 |
| 6° 13′ N | 80° 20′ W | 3,102 |
| 6° 09′ N | 80° 25′ W | 3,111 |
| 6° 09′ N | 80° 25′ W | 3,018 |
| 6° 09′ N | 80° 25′ W | 3,057 |
| 6° 05′ N | 80° 32′ W | 3,044 |
| 6° 03′ N | 80° 35′ W | 3,029 |
| 6° 02′ N | 80° 36′ W | 3,062 |
| 6° 01′ N | 80° 37′ W | 3,084 |
| 5° 59′ N | 80° 40′ W | 3,220 |
| 5° 55′ N | 80° 46′ W | 3,309 |
| 5° 50′ N | 80° 52′ W | 2,932 |
| 5° 47′ N | 80° 55′ W | 2,952 |
| 5° 45′ N | 81° 00′ W | 2,960 |
| 5° 45′ N | 81° 00′ W | 2,978 |
| 5° 45′ N | 81° 02′ W | 2,976 |
| 5° 42′ N | 81° 04′ W | 3,080 |
| 5° 42′ N | 81° 04′ W | 3,057 |
| 5° 39′ N | 81° 09′ W | 3,090 |
| 5° 31′ N | 81° 20′ W | 2,140 |
| 5° 27′ N | 81° 26′ W | 2,759 |
| 5° 22′ N | 81° 33′ W | 2,331 |
| 5° 20′ N | 81° 36′ W | 2,796 |
| 5° 17′ N | 81° 41′ W | 3,806 |
| 5° 13′ N | 81° 45′ W | *3,862* |
| 5° 06′ N | 81° 54′ W | *3,309* |
| 5° 02′ N | 82° 00′ W | *3,033* |
| 4° 58′ N | 82° 05′ W | **1,289** |
| 4° 52′ N | 82° 14′ W | **3,886** |
| 4° 48′ N | 82° 19′ W | *3,710* |
| 4° 46′ N | 82° 22′ W | 3,470 |
| 4° 42′ N | 82° 28′ W | 3,452 |
| 4° 40′ N | 82° 31′ W | 3,213 |
| 4° 38′ N | 82° 33′ W | 2,900 |
| 4° 18′ N | 83° 00′ W | 3,380 |
| 4° 15′ N | 83° 04′ W | *2,940* |
| 4° 12′ N | 83° 07′ W | 3,380 |
| 4° 05′ N | 83° 17′ W | *2,688* |
| 3° 49′ N | 83° 40′ W | *2,811* |
| 3° 47′ N | 83° 42′ W | 3,031 |
| 3° 36′ N | 83° 56′ W | 3,461 |
| 3° 34′ N | 83° 59′ W | 3,812 |
| 2° 17′ N | 85° 39′ W | 2,956 |
| 1° 52′ N | 86° 09′ W | 2,747 |
| 1° 50′ N | 86° 11′ W | 2,838 |
| 1° 45′ N | 86° 15′ W | 2,756 |
| 1° 41′ N | 86° 20′ W | 2,661 |
| 1° 35′ N | 86° 25′ W | 2,756 |
| 1° 31′ N | 86° 30′ W | 2,627 |
| 1° 29′ N | 86° 33′ W | 2,781 |
| 0° 41′ N | 87° 29′ W | 2,533 |
| 0° 37′ N | 87° 34′ W | 2,316 |
| 0° 36′ N | 87° 35′ W | 2,081 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 0° 35′ N | 87° 36′ W | 2,045 |
| 0° 30′ N | 87° 42′ W | 2,489 |
| 0° 29′ N | 87° 50′ W | 2,542 |
| 0° 12′ N | 87° 56′ W | 2,499 |
| 0° 09′ N | 88° 07′ W | 2,453 |
| 0° 05′ N | 88° 11′ W | 2,407 |
| 0° 03′ N | 88° 12′ W | 2,406 |
| 0° 58′ S | 89° 03′ W | 567 |
| 0° 51′ S | 89° 11′ W | 178 |
| PROFILE 5. | | |
| 0° 10′ S | 90° 59′ W | 240 |
| 0° 11′ S | 90° 55′ W | 359 |
| 0° 20′ S | 90° 02′ W | 1,198 |
| 0° 21′ S | 89° 55′ W | 1,342 |
| 0° 22′ S | 89° 48′ W | 1,405 |
| 0° 23′ S | 89° 42′ W | 1,441 |
| 0° 35′ S | 89° 24′ W | 1,036 |
| 0° 40′ S | 89° 13′ W | 881 |
| 0° 42′ S | 89° 12′ W | 441 |
| 0° 46′ S | 89° 12′ W | 276 |
| 0° 48′ S | 89° 13′ W | 595 |
| 0° 54′ S | 89° 16′ W | 567 |
| 1° 05′ S | 89° 26′ W | 331 |
| 1° 10′ S | 89° 28′ W | 740 |
| 1° 50′ S | 89° 36′ W | 3,119 |
| 1° 57′ S | 89° 36′ W | 3,147 |
| 2° 04′ S | 89° 37′ W | 3,175 |
| 2° 08′ S | 89° 37′ W | 3,194 |
| 2° 15′ S | 89° 37′ W | 3,138 |
| 2° 29′ S | 89° 35′ W | 3,230 |
| 2° 41′ S | 89° 34′ W | 3,230 |
| 2° 53′ S | 89° 50′ W | 3,186 |
| 2° 53′ S | 89° 52′ W | 3,273 |
| 2° 53′ S | 90° 04′ W | 3,089 |
| 2° 53′ S | 90° 11′ W | 3,116 |
| 2° 53′ S | 90° 22′ W | 3,162 |
| 2° 53′ S | 90° 26′ W | 3,235 |
| 2° 53′ S | 90° 26′ W | 3,291 |
| 2° 53′ S | 90° 33′ W | 3,235 |
| 2° 53′ S | 90° 43′ W | 3,254 |
| 2° 53′ S | 92° 01′ W | 3,478 |
| 2° 53′ S | 92° 04′ W | 3,438 |
| 2° 53′ S | 92° 05′ W | 3,561 |
| 2° 53′ S | 92° 06′ W | 3,478 |
| 2° 53′ S | 92° 14′ W | 3,523 |
| 2° 53′ S | 92° 18′ W | 3,579 |
| 2° 53′ S | 92° 27′ W | 3,514 |
| 2° 51′ S | 92° 30′ W | 3,514 |
| 2° 46′ S | 92° 35′ W | 3,543 |
| 2° 45′ S | 92° 41′ W | 3,616 |
| 2° 45′ S | 92° 41′ W | 3,625 |
| 2° 32′ S | 92° 35′ W | 3,496 |
| 2° 25′ S | 92° 32′ W | 3,448 |
| 2° 09′ S | 92° 29′ W | 3,356 |
| 2° 01′ S | 92° 25′ W | 3,458 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 1° 39′ S | 92° 14′ W | 3,393 |
| 1° 31′ S | 92° 10′ W | 3,287 |
| 1° 29′ S | 92° 09′ W | 3,269 |
| 1° 23′ S | 92° 06′ W | 3,242 |
| 0° 53′ S | 91° 56′ W | 3,436 |
| 0° 48′ S | 91° 54′ W | 3,490 |
| 0° 42′ S | 91° 50′ W | 3,490 |
| 0° 40′ S | 91° 49′ W | 3,427 |
| 0° 34′ S | 91° 46′ W | 3,326 |
| 0° 34′ S | 91° 46′ W | 3,456 |
| 0° 28′ S | 91° 43′ W | 3,289 |
| 0° 21′ S | 91° 40′ W | 2,269 |
| 0° 08′ S | 91° 33′ W | 2,002 |
| 0° 06′ S | 91° 33′ W | **1,674** |
| 0° 04′ S | 91° 31′ W | 2,258 |
| 0° 02′ S | 91° 30′ W | 1,910 |
| 0° 00′ S | 91° 28′ W | 2,695 |
| 0° 03′ N | 91° 26′ W | 1,728 |
| 0° 08′ N | 91° 20′ W | 2,714 |
| 0° 09′ N | 91° 15′ W | 2,056 |
| 0° 09′ N | 91° 12′ W | 2,512 |
| 0° 09′ N | 91° 03′ W | 3,082 |
| 0° 05′ N | 90° 59′ W | 3,046 |
| 0° 04′ S | 91° 04′ W | 2,385 |
| 0° 00′ S | 91° 07′ W | 2,403 |
| 0° 11′ N | 91° 15′ W | 2,770 |
| 0° 13′ N | 91° 19′ W | 2,001 |
| 0° 16′ N | 91° 29′ W | 3,027 |
| 0° 19′ N | 91° 36′ W | 3,082 |
| 0° 23′ N | 91° 43′ W | 2,954 |
| 0° 27′ N | 91° 52′ W | 2,695 |
| 0° 32′ N | 92° 04′ W | 2,685 |
| 0° 47′ N | 92° 38′ W | 2,770 |
| 0° 49′ N | 92° 44′ W | 2,807 |
| 0° 51′ N | 92° 50′ W | 2,512 |
| 0° 54′ N | 92° 56′ W | 2,723 |
| 0° 58′ N | 93° 03′ W | 2,658 |
| 1° 04′ N | 93° 18′ W | 2,825 |
| 0° 56′ N | 93° 21′ W | 2,862 |
| 1° 00′ N | 93° 29′ W | 3,147 |
| 1° 09′ N | 93° 44′ W | 2,476 |
| 1° 13′ N | 93° 50′ W | 3,197 |
| 1° 16′ N | 93° 55′ W | 3,064 |
| 1° 19′ N | 94° 01′ W | 3,064 |
| 1° 38′ N | 94° 31′ W | 2,973 |
| 1° 40′ N | 94° 34′ W | 2,927 |
| 1° 43′ N | 94° 41′ W | 2,557 |
| 1° 46′ N | 94° 46′ W | 3,102 |
| 1° 48′ N | 94° 49′ W | 3,037 |
| 1° 50′ N | 94° 52′ W | 2,695 |
| 1° 53′ N | 94° 57′ W | 2,918 |
| 1° 55′ N | 95° 02′ W | 3,082 |
| 1° 57′ N | 95° 07′ W | 2,723 |
| 1° 58′ N | 95° 08′ W | 2,734 |
| 1° 59′ N | 95° 11′ W | 2,676 |
| 2° 02′ N | 95° 14′ W | 2,714 |
| 2° 03′ N | 95° 17′ W | 2,476 |
| 2° 04′ N | 95° 18′ W | 2,476 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 2° 05′ N | 95° 20′ W | 2,825 |
| 2° 06′ N | 95° 22′ W | 2,421 |
| 2° 07′ N | 95° 24′ W | 2,512 |
| 2° 18′ N | 95° 44′ W | 2,812 |
| 2° 19′ N | 95° 47′ W | 2,776 |
| 2° 22′ N | 95° 53′ W | 2,438 |
| 2° 23′ N | 95° 55′ W | 2,592 |
| 2° 29′ N | 96° 07′ W | 2,896 |
| 2° 31′ N | 96° 11′ W | 2,546 |
| 2° 33′ N | 96° 16′ W | 3,042 |
| 3° 06′ N | 97° 20′ W | 2,510 |
| 3° 07′ N | 97° 22′ W | 2,785 |
| 3° 08′ N | 97° 24′ W | 2,210 |
| 3° 10′ N | 97° 27′ W | 3,282 |
| 3° 14′ N | 97° 35′ W | 3,116 |
| 3° 15′ N | 97° 38′ W | 3,337 |
| 3° 17′ N | 97° 42′ W | 3,383 |
| 3° 19′ N | 97° 46′ W | 3,393 |
| 3° 20′ N | 97° 55′ W | 3,235 |
| 3° 24′ N | 98° 02′ W | 3,540 |
| 3° 25′ N | 98° 06′ W | 3,762 |
| 3° 28′ N | 98° 12′ W | 3,632 |
| 3° 31′ N | 98° 18′ W | 3,688 |
| 3° 58′ N | 99° 10′ W | 3,476 |
| 4° 03′ N | 99° 17′ W | 3,476 |
| 4° 20′ N | 99° 51′ W | 3,485 |
| 4° 24′ N | 99° 59′ W | 3,503 |
| 4° 29′ N | 100° 08′ W | 3,420 |
| 4° 30′ N | 100° 11′ W | 3,448 |
| 5° 03′ N | 100° 43′ W | 3,300 |
| 5° 30′ N | 101° 23′ W | 3,189 |
| 5° 33′ N | 101° 28′ W | 3,264 |
| 5° 38′ N | 101° 34′ W | 3,503 |
| 5° 40′ N | 101° 39′ W | 3,300 |
| 5° 42′ N | 101° 41′ W | 3,411 |
| 6° 19′ N | 103° 38′ W | 3,333 |
| 6° 31′ N | 103° 57′ W | 3,382 |
| 6° 35′ N | 104° 04′ W | 3,363 |
| 6° 38′ N | 104° 12′ W | 3,382 |
| 6° 42′ N | 104° 19′ W | 3,391 |
| 6° 44′ N | 104° 24′ W | 3,474 |
| 6° 46′ N | 104° 28′ W | 3,382 |
| 6° 50′ N | 104° 36′ W | 3,565 |
| 6° 53′ N | 104° 41′ W | 3,418 |
| 6° 55′ N | 104° 45′ W | 3,566 |
| 6° 56′ N | 104° 46′ W | 3,659 |
| 6° 55′ N | 104° 47′ W | 3,529 |
| 6° 56′ N | 104° 49′ W | 3,640 |
| 6° 57′ N | 104° 52′ W | 3,511 |
| 7° 02′ N | 105° 00′ W | 3,529 |
| 7° 06′ N | 105° 08′ W | 3,760 |
| 7° 08′ N | 105° 12′ W | 3,492 |
| 7° 10′ N | 105° 15′ W | 3,714 |
| 7° 10′ N | 105° 16′ W | 3,732 |
| 7° 12′ N | 105° 21′ W | 3,566 |
| 7° 13′ N | 105° 22′ W | 3,621 |
| 7° 15′ N | 105° 26′ W | 3,843 |
| 7° 16′ N | 105° 27′ W | 3,695 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 7° 44′ N | 106° 22′ W | 3,732 |
| 7° 45′ N | 106° 25′ W | 3,751 |
| 7° 41′ N | 106° 23′ W | 3,770 |
| 7° 44′ N | 106° 28′ W | 3,732 |
| 7° 45′ N | 106° 33′ W | 3,603 |
| 7° 47′ N | 106° 38′ W | 3,714 |
| 7° 48′ N | 106° 40′ W | 3,483 |
| 7° 51′ N | 106° 47′ W | 3,922 |
| 7° 54′ N | 106° 54′ W | 3,877 |
| 7° 56′ N | 107° 00′ W | 3,489 |
| 7° 58′ N | 107° 05′ W | 3,858 |
| 8° 03′ N | 107° 16′ W | 3,636 |
| 8° 06′ N | 107° 23′ W | 3,692 |
| 8° 17′ N | 107° 48′ W | 3,674 |
| 8° 18′ N | 107° 52′ W | 3,480 |
| 8° 19′ N | 107° 54′ W | 3,692 |
| 8° 20′ N | 107° 56′ W | 3,746 |
| 8° 21′ N | 107° 57′ W | 3,830 |
| 8° 22′ N | 108° 00′ W | 3,766 |
| 8° 22′ N | 108° 01′ W | 3,748 |
| 8° 22′ N | 108° 03′ W | 3,877 |
| 8° 23′ N | 108° 05′ W | 3,766 |
| 8° 23′ N | 108° 06′ W | 3,840 |
| 8° 24′ N | 108° 07′ W | 3,987 |
| 8° 24′ N | 108° 09′ W | 3,489 |
| 8° 27′ N | 108° 10′ W | 3,775 |
| 8° 28′ N | 108° 14′ W | 3,507 |
| 8° 28′ N | 108° 15′ W | 3,683 |
| 8° 27′ N | 108° 15′ W | 3,525 |
| 8° 32′ N | 108° 20′ W | 3,230 |
| 8° 34′ N | 108° 25′ W | 3,674 |
| 8° 47′ N | 108° 50′ W | 3,736 |
| 8° 51′ N | 108° 58′ W | 3,762 |
| 9° 10′ N | 109° 36′ W | 3,743 |
| 9° 11′ N | 109° 37′ W | *2,896* |
| 9° 12′ N | 109° 39′ W | 3,468 |
| 9° 15′ N | 109° 39′ W | 3,891 |
| 9° 16′ N | 109° 43′ W | 3,374 |
| 9° 17′ N | 109° 45′ W | 3,171 |
| 9° 21′ N | 109° 51′ W | 3,614 |
| 9° 25′ N | 109° 57′ W | 3,753 |
| 9° 26′ N | 110° 00′ W | 3,762 |
| 9° 28′ N | 110° 04′ W | 3,661 |
| 9° 31′ N | 110° 10′ W | 3,632 |
| 9° 34′ N | 110° 15′ W | 3,574 |
| 9° 38′ N | 110° 21′ W | 3,534 |
| 9° 40′ N | 110° 25′ W | *2,289* |
| 9° 44′ N | 110° 31′ W | 3,907 |
| 9° 50′ N | 110° 43′ W | 3,814 |
| 10° 09′ N | 111° 16′ W | 3,629 |
| 10° 11′ N | 111° 20′ W | 3,943 |
| 10° 11′ N | 111° 21′ W | 3,629 |
| 10° 12′ N | 111° 21′ W | 4,074 |
| 10° 12′ N | 111° 21′ W | 4,055 |
| 10° 13′ N | 111° 24′ W | *2,910* |
| 10° 13′ N | 111° 24′ W | *2,929* |
| 10° 17′ N | 111° 31′ W | 3,989 |
| 10° 17′ N | 111° 31′ W | 3,851 |
| 10° 19′ N | 111° 35′ W | 3,795 |
| 10° 20′ N | 111° 36′ W | 3,222 |
| 10° 21′ N | 111° 38′ W | 3,648 |
| 10° 25′ N | 111° 45′ W | 3,592 |
| 10° 28′ N | 111° 50′ W | 3,260 |
| 10° 31′ N | 111° 57′ W | 3,149 |
| 10° 34′ N | 112° 02′ W | 3,739 |
| 10° 35′ N | 112° 04′ W | 3,685 |
| 10° 37′ N | 112° 08′ W | 4,015 |
| 10° 38′ N | 112° 09′ W | 3,888 |
| 10° 40′ N | 112° 13′ W | 4,027 |
| 10° 41′ N | 112° 16′ W | 3,972 |
| 10° 42′ N | 112° 19′ W | 4,566 |
| 10° 45′ N | 112° 24′ W | 4,020 |
| 10° 47′ N | 112° 27′ W | 3,846 |
| 10° 48′ N | 112° 30′ W | 3,847 |
| 10° 49′ N | 112° 31′ W | 4,009 |
| 10° 52′ N | 112° 37′ W | 4,084 |
| 11° 40′ N | 114° 14′ W | 4,121 |
| 11° 43′ N | 114° 19′ W | 4,098 |
| 11° 45′ N | 114° 25′ W | 4,098 |
| 11° 47′ N | 114° 29′ W | 4,076 |
| 11° 50′ N | 114° 33′ W | 4,151 |
| 12° 20′ N | 115° 28′ W | 4,242 |
| 12° 21′ N | 115° 30′ W | 4,268 |
| 12° 23′ N | 115° 35′ W | 4,180 |
| 12° 24′ N | 115° 36′ W | 3,772 |
| 12° 24′ N | 115° 37′ W | 3,773 |
| 12° 25′ N | 115° 39′ W | 4,115 |
| 12° 26′ N | 115° 53′ W | 3,834 |
| 12° 27′ N | 115° 55′ W | 4,162 |
| 12° 28′ N | 115° 56′ W | 4,206 |
| 12° 35′ N | 116° 14′ W | 4,186 |
| 12° 40′ N | 116° 26′ W | 4,240 |
| 12° 42′ N | 116° 31′ W | 4,213 |
| 13° 27′ N | 117° 56′ W | 4,236 |
| 13° 22′ N | 118° 06′ W | 4,208 |
| 13° 24′ N | 118° 10′ W | 4,193 |
| 13° 26′ N | 118° 15′ W | 4,249 |
| 13° 43′ N | 119° 00′ W | 4,097 |
| 13° 54′ N | 119° 28′ W | 4,291 |
| 14° 06′ N | 119° 58′ W | 4,236 |
| 14° 14′ N | 120° 18′ W | 4,384 |
| 14° 15′ N | 120° 22′ W | 4,348 |
| 14° 52′ N | 121° 37′ W | 4,350 |
| 14° 54′ N | 121° 41′ W | 4,422 |
| 15° 19′ N | 122° 31′ W | 4,291 |
| 15° 27′ N | 122° 46′ W | **4,623** |
| 15° 28′ N | 122° 50′ W | 4,440 |
| 15° 29′ N | 122° 52′ W | 4,385 |
| 15° 41′ N | 123° 18′ W | 4,281 |
| 16° 21′ N | 124° 40′ W | 4,124 |
| 16° 22′ N | 124° 43′ W | 4,310 |
| 16° 24′ N | 124° 48′ W | 4,152 |
| 16° 24′ N | 124° 49′ W | 4,319 |
| 16° 25′ N | 124° 50′ W | 4,154 |
| 16° 27′ N | 124° 53′ W | 4,310 |
| 16° 37′ N | 124° 56′ W | 3,902 |
| 16° 40′ N | 125° 00′ W | 4,197 |
| 16° 41′ N | 125° 01′ W | 4,366 |
| 16° 45′ N | 125° 06′ W | 4,346 |
| 16° 46′ N | 125° 09′ W | 3,938 |
| 16° 50′ N | 125° 15′ W | 4,383 |
| 17° 53′ N | 126° 49′ W | 4,609 |
| | PROFILE 6. | |
| 17° 31′ N | 126° 52′ W | 4,357 |
| 17° 21′ N | 126° 54′ W | *3,827* |
| 17° 19′ N | 126° 54′ W | 4,180 |
| 17° 16′ N | 126° 54′ W | 4,599 |
| 17° 14′ N | 126° 55′ W | *3,655* |
| 16° 48′ N | 126° 59′ W | 4,528 |
| 16° 42′ N | 127° 00′ W | 4,480 |
| 16° 38′ N | 127° 00′ W | 4,379 |
| 16° 36′ N | 127° 01′ W | 4,480 |
| 15° 55′ N | 127° 07′ W | 4,708 |
| 15° 37′ N | 127° 11′ W | 4,811 |
| 15° 24′ N | 127° 10′ W | 4,735 |
| 15° 14′ N | 127° 11′ W | 4,634 |
| 15° 12′ N | 127° 11′ W | 4,792 |
| 15° 07′ N | 127° 12′ W | 4,605 |
| 15° 03′ N | 127° 12′ W | 4,587 |
| 13° 46′ N | 127° 17′ W | 4,803 |
| 13° 41′ N | 127° 17′ W | 4,795 |
| 13° 34′ N | 127° 17′ W | 4,638 |
| 13° 29′ N | 127° 18′ W | 4,652 |
| 13° 25′ N | 127° 18′ W | 4,558 |
| 13° 22′ N | 127° 18′ W | 4,686 |
| 13° 18′ N | 127° 25′ W | 4,803 |
| 13° 16′ N | 127° 25′ W | 4,605 |
| 13° 15′ N | 127° 25′ W | 4,598 |
| 13° 10′ N | 127° 25′ W | 4,843 |
| 13° 08′ N | 127° 25′ W | 4,848 |
| 13° 07′ N | 127° 25′ W | 4,736 |
| 13° 03′ N | 127° 25′ W | 4,872 |
| 12° 54′ N | 127° 26′ W | 4,893 |
| 12° 47′ N | 127° 26′ W | 4,975 |
| 12° 44′ N | 127° 26′ W | 4,783 |
| 12° 42′ N | 127° 26′ W | 4,809 |
| 12° 35′ N | 127° 27′ W | 4,746 |
| 12° 09′ N | 127° 29′ W | 4,876 |
| 11° 52′ N | 127° 30′ W | 4,941 |
| 11° 47′ N | 127° 31′ W | 4,742 |
| 11° 44′ N | 127° 31′ W | 4,736 |
| 11° 41′ N | 127° 31′ W | 4,906 |
| 11° 39′ N | 127° 31′ W | 4,904 |
| 11° 29′ N | 127° 37′ W | 4,889 |
| 11° 29′ N | 127° 38′ W | 4,876 |
| 11° 26′ N | 127° 38′ W | 4,736 |
| 11° 23′ N | 127° 40′ W | 4,609 |
| 11° 17′ N | 127° 41′ W | 4,807 |
| 11° 06′ N | 127° 45′ W | 4,715 |
| 10° 56′ N | 127° 48′ W | 4,561 |
| 10° 52′ N | 127° 50′ W | 4,823 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 10° 41′ N | 127° 54′ W | 4,910 |
| 10° 36′ N | 127° 56′ W | 4,667 |
| 10° 31′ N | 127° 58′ W | 4,690 |
| 10° 22′ N | 128° 01′ W | 4,724 |
| 10° 20′ N | 128° 02′ W | 4,746 |
| 10° 14′ N | 128° 04′ W | 4,590 |
| 10° 12′ N | 128° 04′ W | 4,681 |
| 10° 10′ N | 128° 05′ W | 4,596 |
| 10° 02′ N | 128° 08′ W | 4,638 |
| 9° 58′ N | 128° 10′ W | 4,607 |
| 9° 54′ N | 128° 11′ W | 4,699 |
| 9° 48′ N | 128° 12′ W | 4,596 |
| 9° 48′ N | 128° 13′ W | 4,609 |
| 9° 43′ N | 128° 15′ W | 4,730 |
| 9° 41′ N | 128° 16′ W | 4,746 |
| 9° 39′ N | 128° 16′ W | 4,692 |
| 9° 37′ N | 128° 17′ W | 4,655 |
| 9° 33′ N | 128° 19′ W | 4,747 |
| 9° 31′ N | 128° 20′ W | 4,721 |
| 9° 29′ N | 128° 20′ W | 4,607 |
| 9° 27′ N | 128° 21′ W | 4,684 |
| 9° 22′ N | 128° 23′ W | 4,758 |
| 9° 19′ N | 128° 25′ W | 4,663 |
| 9° 16′ N | 128° 26′ W | 4,708 |
| 9° 14′ N | 128° 26′ W | 4,667 |
| 8° 35′ N | 128° 42′ W | 4,581 |
| 8° 32′ N | 128° 44′ W | 5,502 |
| 8° 29′ N | 128° 45′ W | 4,749 |
| 8° 28′ N | 128° 46′ W | 4,711 |
| 8° 25′ N | 128° 47′ W | 4,749 |
| 8° 24′ N | 128° 48′ W | 4,745 |
| 8° 19′ N | 128° 50′ W | 4,616 |
| 8° 13′ N | 128° 52′ W | 4,739 |
| 8° 13′ N | 128° 52′ W | 4,749 |
| 8° 11′ N | 128° 53′ W | 4,598 |
| 8° 08′ N | 128° 54′ W | 4,695 |
| 8° 04′ N | 128° 56′ W | 4,611 |
| 7° 59′ N | 128° 59′ W | 4,721 |
| 7° 53′ N | 129° 01′ W | 4,626 |
| 7° 44′ N | 129° 05′ W | 4,563 |
| 7° 32′ N | 129° 10′ W | 4,281 |
| 6° 57′ N | 129° 24′ W | 4,485 |
| 6° 54′ N | 129° 25′ W | 4,552 |
| 6° 52′ N | 129° 26′ W | 4,485 |
| 6° 49′ N | 129° 27′ W | 4,356 |
| 6° 44′ N | 129° 29′ W | 4,351 |
| 6° 40′ N | 129° 33′ W | 4,369 |
| 6° 35′ N | 129° 36′ W | 4,369 |
| 6° 30′ N | 129° 40′ W | 4,318 |
| 6° 26′ N | 129° 43′ W | 4,325 |
| 6° 20′ N | 129° 47′ W | 4,298 |
| 6° 17′ N | 129° 49′ W | 4,389 |
| 6° 12′ N | 129° 52′ W | 4,353 |
| 6° 09′ N | 129° 54′ W | 4,260 |
| 6° 07′ N | 129° 56′ W | 4,282 |
| 6° 03′ N | 129° 59′ W | 4,371 |
| 6° 02′ N | 130° 00′ W | 4,374 |
| 6° 00′ N | 130° 01′ W | 4,302 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 5° 55′ N | 130° 05′ W | 4,374 |
| 5° 04′ N | 130° 41′ W | 4,305 |
| 4° 21′ N | 131° 26′ W | 4,596 |
| 3° 16′ N | 132° 47′ W | 4,292 |
| 3° 12′ N | 132° 51′ W | 4,208 |
| 3° 07′ N | 132° 58′ W | 4,338 |
| 3° 06′ N | 132° 59′ W | 4,316 |
| 3° 05′ N | 133° 01′ W | 4,334 |
| 2° 29′ N | 133° 40′ W | 4,325 |
| 0° 00′ N | 135° 44′ W | 4,391 |
| 0° 08′ S | 135° 57′ W | 4,426 |
| 1° 29′ S | 136° 08′ W | 4,389 |
| 2° 19′ S | 136° 15′ W | 4,449 |
| 3° 00′ S | 136° 23′ W | 4,511 |
| 3° 00′ S | 136° 23′ W | 4,467 |
| 3° 05′ S | 136° 25′ W | 4,525 |
| 3° 08′ S | 136° 27′ W | 4.580 |
| 3° 11′ S | 136° 29′ W | 4,448 |
| 3° 12′ S | 136° 29′ W | 4,637 |
| 3° 15′ S | 136° 30′ W | 4,571 |
| 3° 22′ S | 136° 35′ W | 4,629 |
| 3° 51′ S | 136° 51′ W | 4,763 |
| 5° 28′ S | 137° 44′ W | 4.098 |
| 5° 30′ S | 137° 45′ W | 4,506 |
| 5° 37′ S | 137° 51′ W | 4,610 |
| 5° 37′ S | 137° 51′ W | 4,370 |
| 7° 57′ S | 139° 19′ W | 3,765 |
| 8° 07′ S | 139° 23′ W | 3,103 |
| 8° 08′ S | 139° 24′ W | 3,038 |
| 8° 09′ S | 139° 25′ W | 2.949 |
| 8° 10′ S | 139° 25′ W | 3,084 |
| 8° 14′ S | 139° 26′ W | 3,324 |
| 8° 25′ S | 139° 30′ W | 3,581 |
| 8° 29′ S | 139° 33′ W | 3,405 |
| 8° 29′ S | 139° 35′ W | 3,315 |
| 8° 33′ S | 139° 36′ W | 3,315 |
| 8° 35′ S | 139° 38′ W | 3,296 |
| 8° 37′ S | 139° 42′ W | 2.903 |
| 8° 39′ S | 139° 45′ W | 2,084 |
| 8° 41′ S | 139° 49′ W | 694 |
| 9° 13′ S | 140° 04′ W | 368 |
| 9° 17′ S | 140° 11′ W | 2,157 |
| 9° 33′ S | 140° 32′ W | 3,709 |
| 9° 37′ S | 140° 38′ W | 3,866 |
| 10° 10′ S | 141° 26′ W | 4,375 |
| 10° 14′ S | 141° 31′ W | 4,375 |
| 10° 18′ S | 141° 37′ W | 4,451 |
| 10° 24′ S | 141° 47′ W | 3,858 |
| 10° 25′ S | 141° 49′ W | 4,599 |
| 10° 27′ S | 141° 52′ W | 4,527 |
| 10° 29′ S | 141° 57′ W | 4,563 |
| 10° 31′ S | 142° 01′ W | 4,631 |
| 10° 34′ S | 142° 05′ W | 4,657 |
| 10° 41′ S | 142° 13′ W | 4,717 |
| 10° 44′ S | 142° 18′ W | 4,775 |
| 10° 49′ S | 142° 26′ W | 4,861 |
| 10° 54′ S | 142° 33′ W | 4,661 |
| 10° 55′ S | 142° 35′ W | 4,825 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 10° 56′ S | 142° 36′ W | 4,581 |
| 10° 57′ S | 142° 39′ W | 4,572 |
| 10° 59′ S | 142° 41′ W | 4,918 |
| 11° 01′ S | 142° 44′ W | 4,927 |
| 11° 28′ S | 143° 25′ W | 4,702 |
| 11° 30′ S | 143° 28′ W | 4,673 |
| 11° 31′ S | 143° 31′ W | 4,790 |
| 11° 35′ S | 143° 36′ W | 4,202 |
| 11° 37′ S | 143° 39′ W | 4,786 |
| 11° 45′ S | 143° 52′ W | 4,718 |
| 11° 47′ S | 143° 54′ W | 4,825 |
| 11° 48′ S | 143° 56′ W | 4,711 |
| 11° 50′ S | 143° 59′ W | 4,823 |
| 11° 52′ S | 144° 04′ W | 4,806 |
| 11° 55′ S | 144° 08′ W | 4,596 |
| 11° 56′ S | 144° 10′ W | 4,392 |
| 11° 56′ S | 144° 11′ W | 4,711 |
| 11° 57′ S | 144° 12′ W | 4,662 |
| 11° 58′ S | 144° 14′ W | 4,571 |
| 11° 58′ S | 144° 14′ W | 4,637 |
| 11° 59′ S | 144° 16′ W | 5,008 |
| 12° 00′ S | 144° 16′ W | 4,933 |
| 12° 01′ S | 144° 20′ W | 4,760 |
| 12° 02′ S | 144° 22′ W | 4,068 |
| 12° 05′ S | 144° 24′ W | 4,451 |
| 12° 05′ S | 144° 26′ W | 3,710 |
| 12° 07′ S | 144° 30′ W | 4,415 |
| 12° 13′ S | 144° 41′ W | 4,673 |
| 12° 20′ S | 144° 51′ W | 4,634 |
| 12° 39′ S | 145° 28′ W | 5,009 |
| 12° 43′ S | 145° 34′ W | 4,904 |
| 12° 47′ S | 145° 40′ W | 4,933 |
| 12° 49′ S | 145° 44′ W | 4,895 |
| 12° 51′ S | 145° 48′ W | 4,575 |
| 12° 51′ S | 145° 48′ W | 4,735 |
| 12° 53′ S | 145° 52′ W | *2,714* |
| 12° 56′ S | 145° 56′ W | 4,978 |
| 12° 57′ S | 146° 00′ W | 4,585 |
| 13° 00′ S | 146° 04′ W | 5,034 |
| 13° 04′ S | 146° 02′ W | **5,044** |
| 13° 08′ S | 146° 08′ W | 4,875 |
| 13° 14′ S | 146° 14′ W | 4,924 |
| 13° 18′ S | 146° 19′ W | 4,942 |
| 13° 27′ S | 146° 29′ W | 4,679 |
| 13° 28′ S | 146° 30′ W | 3,858 |
| 13° 31′ S | 146° 35′ W | 4,735 |
| 14° 05′ S | 147° 15′ W | 4,116 |
| 14° 10′ S | 147° 21′ W | 3,856 |
| 14° 12′ S | 147° 37′ W | 3,856 |
| 14° 17′ S | 147° 44′ W | 3,247 |
| 14° 20′ S | 147° 48′ W | 2,789 |
| 14° 22′ S | 147° 50′ W | 2,954 |
| 14° 28′ S | 147° 58′ W | 1,974 |
| 14° 30′ S | 148° 01′ W | 1,884 |
| 14° 42′ S | 148° 16′ W | 1,611 |
| 14° 47′ S | 148° 22′ W | 2,585 |
| 14° 50′ S | 148° 27′ W | 2,203 |
| 14° 55′ S | 148° 32′ W | 1,165 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 15° 01′ S | 148° 34′ W | **1,348** |
| 15° 48′ S | 148° 52′ W | 4,325 |
| 15° 50′ S | 148° 53′ W | 4,262 |
| 16° 02′ S | 148° 56′ W | 4,299 |
| 15° 59′ S | 148° 57′ W | 4,283 |
| 16° 04′ S | 148° 57′ W | 4,312 |
| 16° 11′ S | 148° 57′ W | 4,312 |
| 16° 18′ S | 148° 57′ W | 4,293 |
| 16° 18′ S | 148° 57′ W | 4,267 |
| 16° 29′ S | 148° 57′ W | 4,200 |
| 16° 33′ S | 148° 57′ W | 3,588 |
| 16° 34′ S | 148° 57′ W | 4,134 |
| 16° 42′ S | 148° 47′ W | 4,097 |
| 16° 50′ S | 148° 57′ W | 3,965 |
| PROFILE 7. | | |
| 13° 36′ S | 149° 38′ W | 4,172 |
| 13° 34′ S | 149° 38′ W | 4,247 |
| 13° 23′ S | 149° 27′ W | 4,618 |
| 13° 24′ S | 149° 22′ W | 4,630 |
| 13° 18′ S | 149° 20′ W | 4,687 |
| 12° 34′ S | 149° 43′ W | 4,855 |
| 12° 25′ S | 149° 46′ W | 4,846 |
| 12° 18′ S | 149° 50′ W | 4,715 |
| 12° 08′ S | 149° 55′ W | 4,659 |
| 12° 01′ S | 149° 59′ W | 4,817 |
| 11° 56′ S | 150° 01′ W | 4,865 |
| 11° 18′ S | 150° 20′ W | 4,979 |
| 11° 17′ S | 150° 21′ W | 4,959 |
| 5° 49′ S | 153° 03′ W | 4,938 |
| 5° 36′ S | 153° 02′ W | 4,976 |
| 4° 23′ S | 152° 57′ W | 4,826 |
| 4° 23′ S | 152° 57′ W | 4,837 |
| 4° 22′ S | 152° 56′ W | 4,938 |
| 4° 19′ S | 152° 56′ W | 5,110 |
| 4° 17′ S | 152° 57′ W | 5,279 |
| 4° 17′ S | 153° 02′ W | 5,251 |
| 2° 10′ S | 152° 18′ W | 4,729 |
| 0° 32′ S | 151° 40′ W | 4,571 |
| 0° 31′ S | 151° 39′ W | 4,590 |
| 0° 30′ S | 151° 39′ W | 4,451 |
| 0° 29′ S | 151° 38′ W | 4,451 |
| 0° 20′ S | 151° 30′ W | 4,444 |
| 0° 02′ N | 151° 06′ W | **2,465** |
| 0° 13′ N | 150° 50′ W | 4,392 |
| 0° 16′ N | 150° 48′ W | 4,458 |
| 1° 42′ N | 149° 53′ W | 4,432 |
| 1° 43′ N | 149° 52′ W | 4,524 |
| 1° 48′ N | 149° 50′ W | 4,535 |
| 1° 50′ N | 149° 50′ W | 4,524 |
| 3° 26′ N | 149° 40′ W | *5,235* |
| 3° 28′ N | 149° 40′ W | *4,881* |
| 3° 44′ N | 149° 39′ W | *5,142* |
| 6° 52′ N | 149° 19′ W | 4,673 |
| 6° 52′ N | 149° 19′ W | 4,749 |
| 6° 54′ N | 149° 18′ W | 4,580 |
| 7° 00′ N | 149° 16′ W | 4,506 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 7° 33′ N | 149° 02′ W | 4,711 |
| 7° 35′ N | 149° 00′ W | *3,941* |
| 8° 02′ N | 148° 49′ W | 4,935 |
| 8° 04′ N | 148° 48′ W | 4,861 |
| 8° 05′ N | 148° 47′ W | 4,918 |
| 8° 07′ N | 148° 46′ W | 4,918 |
| 8° 09′ N | 148° 45′ W | 4,889 |
| 8° 10′ N | 148° 45′ W | 5,226 |
| 8° 11′ N | 148° 46′ W | 5,235 |
| 8° 11′ N | 148° 46′ W | 5,212 |
| 8° 13′ N | 148° 46′ W | 5,226 |
| 8° 15′ N | 148° 47′ W | 5,226 |
| 9° 17′ N | 148° 40′ W | 5,421 |
| 9° 20′ N | 148° 40′ W | 5,402 |
| 9° 28′ N | 148° 39′ W | 5,361 |
| 13° 23′ N | 151° 10′ W | 5,565 |
| 13° 25′ N | 151° 11′ W | 5,520 |
| 15° 13′ N | 152° 49′ W | 5,746 |
| 15° 13′ N | 152° 49′ W | **5,789** |
| 20° 20′ N | 157° 02′ W | 3,576 |
| 20° 28′ N | 157° 07′ W | 4,781 |
| PROFILE 8. | | |
| 18° 35′ N | 160° 35′ W | 5,226 |
| 18° 28′ N | 160° 39′ W | 5,193 |
| 18° 22′ N | 160° 46′ W | 5,275 |
| 18° 22′ N | 160° 46′ W | 5,281 |
| 18° 18′ N | 160° 50′ W | 5,255 |
| 18° 15′ N | 160° 53′ W | 5,337 |
| 18° 07′ N | 161° 01′ W | 5,450 |
| 18° 03′ N | 161° 06′ W | 5,487 |
| 17° 30′ N | 161° 40′ W | 5,478 |
| 17° 24′ N | 161° 47′ W | 5,611 |
| 16° 57′ N | 162° 15′ W | 5,590 |
| 16° 48′ N | 162° 24′ W | 5,026 |
| 16° 45′ N | 162° 27′ W | 5,611 |
| 16° 40′ N | 162° 33′ W | 5,159 |
| 16° 36′ N | 162° 36′ W | 4,739 |
| 16° 29′ N | 162° 44′ W | 5,159 |
| 16° 26′ N | 162° 51′ W | 5,591 |
| 16° 22′ N | 162° 55′ W | 5,590 |
| 16° 20′ N | 162° 59′ W | 5,591 |
| 16° 19′ N | 163° 00′ W | 5,591 |
| 16° 16′ N | 163° 05′ W | 5,475 |
| 16° 14′ N | 163° 07′ W | 5,610 |
| 16° 13′ N | 163° 08′ W | 5,494 |
| 16° 07′ N | 163° 15′ W | 5,516 |
| 16° 00′ N | 163° 23′ W | 5,498 |
| 15° 57′ N | 163° 26′ W | 5,478 |
| 15° 50′ N | 163° 33′ W | 5,478 |
| 16° 43′ N | 163° 40′ W | 5,526 |
| 16° 41′ N | 163° 42′ W | 5,649 |
| 14° 53′ N | 164° 37′ W | 5,563 |
| 14° 48′ N | 164° 43′ W | 5,563 |
| 14° 45′ N | 164° 48′ W | 5,468 |
| 14° 39′ N | 164° 54′ W | 5,450 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 14° 37′ N | 164° 56′ W | 5,408 |
| 14° 35′ N | 164° 57′ W | 5,304 |
| 14° 33′ N | 165° 00′ W | 5,492 |
| 14° 31′ N | 165° 02′ W | 5,417 |
| 14° 29′ N | 165° 03′ W | 5,430 |
| 14° 22′ N | 165° 09′ W | 5,611 |
| 14° 13′ N | 165° 16′ W | 5,630 |
| 14° 07′ N | 165° 21′ W | 4,702 |
| 14° 07′ N | 165° 21′ W | 4,542 |
| 14° 04′ N | 165° 24′ W | 5,440 |
| 13° 58′ N | 165° 27′ W | 5,122 |
| 13° 55′ N | 165° 31′ W | 5,178 |
| 13° 48′ N | 165° 36′ W | *3,350* |
| 13° 44′ N | 165° 40′ W | *2,763* |
| 13° 36′ N | 165° 46′ W | *5,302* |
| 13° 30′ N | 165° 52′ W | *5,265* |
| 13° 23′ N | 165° 57′ W | *5,217* |
| 13° 16′ N | 166° 03′ W | *5,102* |
| 13° 09′ N | 166° 10′ W | *2,380* |
| 13° 01′ N | 166° 16′ W | *5,255* |
| 12° 54′ N | 166° 22′ W | *5,283* |
| 12° 48′ N | 166° 27′ W | 4,514 |
| 12° 41′ N | 166° 33′ W | *5,084* |
| 12° 37′ N | 166° 37′ W | *5,198* |
| 12° 37′ N | 166° 37′ W | *5,263* |
| 12° 33′ N | 166° 40′ W | 5,226 |
| 12° 29′ N | 166° 43′ W | 5,159 |
| 12° 20′ N | 166° 48′ W | *5,323* |
| 12° 16′ N | 166° 50′ W | *5,389* |
| 11° 51′ N | 167° 03′ W | 5,264 |
| 11° 48′ N | 167° 05′ W | 5,244 |
| 11° 43′ N | 167° 08′ W | 5,178 |
| 11° 43′ N | 167° 08′ W | 5,207 |
| 11° 35′ N | 167° 12′ W | 5,159 |
| 11° 25′ N | 167° 17′ W | 5,117 |
| 11° 10′ N | 167° 25′ W | 5,318 |
| 11° 03′ N | 167° 29′ W | 5,318 |
| 10° 54′ N | 167° 34′ W | 5,178 |
| 10° 46′ N | 167° 38′ W | 5,283 |
| 10° 37′ N | 167° 43′ W | 4,246 |
| 10° 32′ N | 167° 45′ W | 3,781 |
| 10° 23′ N | 167° 50′ W | 4,646 |
| 10° 21′ N | 167° 51′ W | 4,152 |
| 10° 19′ N | 167° 53′ W | 1,809 |
| 10° 15′ N | 167° 57′ W | 3,341 |
| 10° 11′ N | 168° 01′ W | 4,999 |
| 10° 07′ N | 168° 05′ W | 5,346 |
| 10° 05′ N | 168° 07′ W | 5,393 |
| 10° 00′ N | 168° 11′ W | 5,340 |
| 9° 55′ N | 168° 17′ W | 5,248 |
| 9° 51′ N | 168° 20′ W | 5,163 |
| 9° 44′ N | 168° 27′ W | 5,191 |
| 9° 37′ N | 168° 34′ W | 5,244 |
| 9° 31′ N | 168° 40′ W | 5,257 |
| 9° 17′ N | 168° 54′ W | 5,162 |
| 9° 10′ N | 169° 01′ W | 5,106 |
| 9° 05′ N | 169° 08′ W | 5,041 |
| 9° 00′ N | 169° 14′ W | 5,118 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 8° 49′ N | 169° 24′ W | 5,456 |
| 8° 37′ N | 169° 32′ W | 5,455 |
| 8° 31′ N | 169° 39′ W | 5,060 |
| 8° 27′ N | 169° 44′ W | 5,539 |
| 8° 02′ N | 170° 12′ W | 5,530 |
| 6° 56′ N | 171° 24′ W | 5,835 |
| 6° 51′ N | 171° 29′ W | *6,042* |
| 6° 44′ N | 171° 36′ W | *6,362* |
| 6° 43′ N | 171° 37′ W | *6,305* |
| 6° 41′ N | 171° 40′ W | 5,586 |
| 6° 37′ N | 171° 44′ W | 6,003 |
| 6° 35′ N | 171° 47′ W | 5,824 |
| 6° 33′ N | 171° 49′ W | 5,611 |
| 6° 30′ N | 171° 50′ W | 5,835 |
| 6° 29′ N | 171° 51′ W | 5,668 |
| 6° 21′ N | 171° 53′ W | 5,725 |
| 6° 20′ N | 171° 53′ W | 5,459 |
| 3° 37′ N | 172° 42′ W | 5,548 |
| 3° 31′ N | 172° 48′ W | 5,303 |
| 3° 25′ N | 172° 54′ W | 5,407 |
| 3° 19′ N | 173° 00′ W | 5,295 |
| 3° 14′ N | 173° 05′ W | 5,504 |
| 2° 30′ N | 173° 47′ W | 5,533 |
| 2° 28′ N | 173° 48′ W | 5,436 |
| 2° 25′ N | 173° 52′ W | 5,640 |
| 2° 23′ N | 173° 53′ W | 5,591 |
| 2° 22′ N | 173° 55′ W | 5,341 |
| 2° 20′ N | 173° 56′ W | 5,562 |
| 2° 18′ N | 173° 58′ W | 5,494 |
| 0° 23′ N | 176° 19′ W | 4,078 |
| 0° 19′ N | 176° 24′ W | *1,163* |
| 0° 18′ N | 176° 25′ W | *1,813* |
| 0° 16′ N | 176° 27′ W | *857* |
| 0° 13′ N | 176° 30′ W | **729** |
| 0° 07′ N | 176° 31′ W | *1,895* |
| 0° 03′ N | 176° 33′ W | 5,346 |
| 0° 06′ S | 176° 39′ W | 5,518 |
| 0° 09′ S | 176° 40′ W | 5,596 |
| 0° 16′ S | 176° 43′ W | 5,758 |
| 0° 23′ S | 176° 46′ W | 5,710 |
| 0° 38′ S | 176° 54′ W | 5,548 |
| 1° 14′ S | 177° 12′ W | 5,700 |
| 1° 18′ S | 177° 14′ W | 5,492 |
| 2° 18′ S | 177° 42′ W | 5,762 |
| 2° 21′ S | 177° 43′ W | 5,781 |
| 2° 24′ S | 177° 45′ W | 5,686 |
| 2° 29′ S | 177° 47′ W | 5,686 |
| 2° 33′ S | 177° 45′ W | 5,587 |
| 2° 33′ S | 177° 44′ W | 5,568 |

PROFILE 9.

| | | |
|---|---|---|
| 2° 46′ S | 178° 41′ W | 5,624 |
| 2° 46′ S | 178° 44′ W | 5,744 |
| 2° 47′ S | 178° 49′ W | 5,753 |
| 2° 47′ S | 178° 51′ W | 5,380 |
| 2° 48′ S | 178° 53′ W | 5,465 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 2° 48′ S | 178° 56′ W | 5,475 |
| 2° 48′ S | 178° 57′ W | 5,380 |
| 2° 48′ S | 178° 58′ W | 5,630 |
| 2° 49′ S | 179° 03′ W | 5,591 |
| 2° 49′ S | 179° 05′ W | 5,098 |
| 2° 49′ S | 179° 08′ W | 5,687 |
| 2° 50′ S | 179° 17′ W | 5,257 |
| 2° 50′ S | 179° 19′ W | 5,478 |
| 2° 51′ S | 179° 27′ W | 5,328 |
| 2° 52′ S | 179° 38′ W | 5,349 |
| 2° 52′ S | 179° 43′ W | 5,387 |
| 2° 57′ S | 179° 52′ W | *5,455* |
| 2° 58′ S | 179° 55′ W | *5,330* |
| 2° 59′ S | 179° 55′ E | *5,549* |
| 3° 00′ S | 179° 49′ E | *5,464* |
| 3° 01′ S | 179° 42′ E | 5,473 |
| 3° 02′ S | 179° 35′ E | 5,464 |
| 3° 05′ S | 179° 20′ E | 5,512 |
| 3° 06′ S | 179° 09′ E | 5,512 |
| 3° 08′ S | 178° 58′ E | 5,512 |
| 3° 12′ S | 178° 33′ E | 5,182 |
| 3° 13′ S | 178° 38′ E | 3,689 |
| 3° 13′ S | 178° 23′ E | 5,219 |
| 3° 12′ S | 178° 15′ E | 5,370 |
| 3° 11′ S | 178° 01′ E | 5,464 |
| 3° 10′ S | 177° 52′ E | 5,389 |
| 3° 10′ S | 177° 39′ E | 5,004 |
| 3° 11′ S | 177° 30′ E | 5,286 |
| 3° 12′ S | 177° 09′ E | 5,359 |
| 3° 13′ S | 177° 01′ E | 4,782 |
| 3° 13′ S | 176° 58′ E | 5,031 |
| 3° 13′ S | 176° 54′ E | 4,022 |
| 3° 14′ S | 176° 47′ E | 5,191 |
| 3° 14′ S | 176° 40′ E | 5,248 |
| 3° 14′ S | 176° 25′ E | 5,257 |
| 3° 16′ S | 176° 04′ E | 5,248 |
| 3° 16′ S | 175° 53′ E | 5,238 |
| 3° 17′ S | 175° 43′ E | 5,219 |
| 3° 17′ S | 175° 36′ E | 5,117 |
| 3° 17′ S | 175° 30′ E | 4,725 |
| 3° 18′ S | 175° 25′ E | 3,748 |
| 3° 18′ S | 175° 20′ E | 4,921 |
| 3° 19′ S | 174° 58′ E | 5,135 |
| 3° 20′ S | 174° 47′ E | 5,097 |
| 3° 20′ S | 174° 41′ E | 5,088 |
| 3° 20′ S | 174° 32′ E | 4,966 |
| 3° 21′ S | 174° 21′ E | 4,837 |
| 3° 21′ S | 174° 16′ E | 4,819 |
| 3° 21′ S | 174° 11′ E | 4,632 |
| 3° 21′ S | 174° 08′ E | 4,725 |
| 3° 20′ S | 174° 06′ E | 4,670 |
| 3° 20′ S | 174° 05′ E | 4,651 |
| 3° 19′ S | 173° 57′ E | 4,456 |
| 3° 18′ S | 173° 53′ E | 4,302 |
| 3° 16′ S | 173° 43′ E | 4,022 |
| 3° 15′ S | 173° 35′ E | 4,116 |
| 3° 12′ S | 173° 11′ E | 4,264 |
| 3° 10′ S | 173° 02′ E | 4,255 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 3° 09′ S | 172° 51′ E | 4,226 |
| 3° 07′ S | 172° 41′ E | 4,217 |
| 3° 05′ S | 172° 29′ E | 4,078 |
| 3° 04′ S | 172° 19′ E | 4,143 |
| 3° 01′ S | 172° 01′ E | 4,182 |
| 2° 59′ S | 171° 52′ E | 4,273 |
| 2° 58′ S | 171° 46′ E | 4,302 |
| 2° 57′ S | 171° 38′ E | 4,190 |
| 2° 56′ S | 171° 28′ E | 4,096 |
| 2° 54′ S | 171° 22′ E | 4,096 |
| 2° 54′ S | 171° 18′ E | 4,096 |
| 2° 52′ S | 171° 12′ E | 4,096 |
| 2° 51′ S | 171° 08′ E | 4,106 |
| 2° 50′ S | 171° 02′ E | 4,134 |
| 2° 48′ S | 170° 55′ E | 4,190 |
| 2° 46′ S | 170° 48′ E | 4,226 |
| 2° 44′ S | 170° 41′ E | 4,245 |
| 2° 41′ S | 170° 27′ E | 4,097 |
| 2° 39′ S | 170° 20′ E | *3,987* |
| 2° 37′ S | 170° 13′ E | *3,978* |
| 2° 35′ S | 170° 06′ E | *3,951* |
| 2° 34′ S | 170° 01′ E | *3,932* |
| 2° 32′ S | 169° 53′ E | 3,935 |
| 2° 31′ S | 169° 47′ E | 3,944 |
| 2° 30′ S | 169° 45′ E | 3,869 |
| 2° 29′ S | 169° 40′ E | *4,000* |
| 2° 23′ S | 169° 24′ E | *4,054* |
| 2° 20′ S | 169° 16′ E | *4,054* |
| 2° 18′ S | 169° 10′ E | *4,016* |
| 2° 11′ S | 168° 56′ E | 3,915 |
| 2° 08′ S | 168° 50′ E | 3,869 |
| 2° 05′ S | 168° 45′ E | 3,879 |
| 2° 03′ S | 168° 41′ E | 3,915 |
| 1° 59′ S | 168° 35′ E | 3,840 |
| 1° 57′ S | 168° 30′ E | 3,831 |
| 1° 54′ S | 168° 26′ E | 3,850 |
| 1° 52′ S | 168° 22′ E | 3,850 |
| 1° 44′ S | 168° 06′ E | 3,990 |
| 1° 42′ S | 168° 03′ E | 4,007 |
| 1° 39′ S | 167° 57′ E | 4,109 |
| 1° 36′ S | 167° 53′ E | 4,044 |
| 1° 35′ S | 167° 51′ E | 4,053 |
| 1° 35′ S | 167° 51′ E | 3,729 |
| 1° 35′ S | 167° 50′ E | 4,034 |
| 1° 32′ S | 167° 42′ E | 4,127 |
| 1° 29′ S | 167° 39′ E | 4,007 |
| 1° 25′ S | 167° 32′ E | 3,990 |
| 1° 24′ S | 167° 28′ E | 3,960 |
| 1° 20′ S | 167° 24′ E | 3,942 |
| 1° 20′ S | 167° 21′ E | 3,978 |
| 1° 16′ S | 167° 16′ E | 3,949 |
| 1° 13′ S | 167° 10′ E | 4,032 |
| 1° 09′ S | 167° 05′ E | 4,180 |
| 1° 07′ S | 167° 00′ E | 4,355 |
| 1° 04′ S | 166° 55′ E | 4,355 |
| 0° 52′ S | 166° 37′ E | 4,225 |
| 0° 50′ S | 166° 35′ E | 4,299 |
| 0° 44′ S | 166° 25′ E | 4,262 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 0° 41′ S | 166° 19′ E | 4,312 |
| 0° 37′ S | 166° 12′ E | 4,345 |
| 0° 34′ S | 166° 06′ E | 4,374 |
| 0° 30′ S | 166° 00′ E | 4,383 |
| 0° 26′ S | 165° 54′ E | 4,383 |
| 0° 22′ S | 165° 48′ E | 4,374 |
| 0° 18′ S | 165° 40′ E | *4,410* |
| 0° 17′ S | 165° 38′ E | 4,309 |
| 0° 16′ S | 165° 37′ E | 4,192 |
| 0° 14′ S | 165° 34′ E | 4,421 |
| 0° 10′ S | 165° 26′ E | 4,411 |
| 0° 10′ S | 165° 34′ E | 4,430 |
| 0° 08′ S | 165° 27′ E | 4,411 |
| 0° 04′ S | 165° 06′ E | 4,365 |
| 0° 00′ S | 164° 41′ E | 4,446 |
| 0° 01′ N | 164° 33′ E | 4,401 |
| 0° 03′ N | 164° 25′ E | 4,401 |
| 0° 04′ N | 164° 19′ E | 4,438 |
| 0° 05′ N | 164° 11′ E | 4,429 |
| 0° 07′ N | 164° 03′ E | 4,446 |
| 0° 08′ N | 163° 55′ E | 4,446 |
| 0° 10′ N | 163° 47′ E | 4,446 |
| 0° 11′ N | 163° 39′ E | 4,437 |
| 0° 16′ N | 163° 12′ E | 4,446 |
| 0° 15′ N | 162° 57′ E | 4,429 |
| 0° 17′ N | 162° 43′ E | 4,420 |
| 0° 18′ N | 162° 34′ E | 4,365 |
| 0° 19′ N | 162° 24′ E | 4,375 |
| 0° 20′ N | 162° 15′ E | 4,211 |
| 0° 21′ N | 162° 05′ E | 4,704 |
| 0° 22′ N | 161° 56′ E | 4,078 |
| 0° 25′ N | 161° 23′ E | 3,837 |
| 0° 26′ N | 161° 15′ E | 3,644 |
| 0° 27′ N | 161° 06′ E | 3,476 |
| 0° 28′ N | 160° 57′ E | 3,247 |
| 0° 29′ N | 160° 49′ E | 3,588 |
| 0° 30′ N | 160° 39′ E | 2,886 |
| 0° 31′ N | 160° 31′ E | 2,804 |
| 0° 32′ N | 160° 23′ E | 2,786 |
| 0° 33′ N | 160° 15′ E | 2,795 |
| 0° 34′ N | 160° 09′ E | 2,885 |
| 0° 34′ N | 160° 06′ E | 2,806 |
| 0° 35′ N | 159° 59′ E | 2,868 |
| 0° 35′ N | 159° 58′ E | 2,833 |
| 0° 36′ N | 159° 50′ E | 2,833 |
| 0° 37′ N | 159° 43′ E | 2,853 |
| 0° 39′ N | 159° 25′ E | 2,660 |
| 0° 40′ N | 159° 16′ E | 2,585 |
| 0° 41′ N | 159° 08′ E | 2,521 |
| 0° 42′ N | 159° 00′ E | 2,484 |
| 0° 43′ N | 158° 50′ E | 2,549 |
| 0° 43′ N | 158° 43′ E | 2,493 |
| 0° 44′ N | 158° 35′ E | 2,467 |
| 0° 45′ N | 158° 24′ E | 2,394 |
| 0° 46′ N | 158° 20′ E | 2,381 |
| 0° 47′ N | 158° 10′ E | 2,366 |
| 0° 47′ N | 158° 04′ E | 2,357 |
| 0° 49′ N | 157° 48′ E | 2,293 |
| 0° 50′ N | 157° 33′ E | 2,249 |
| 0° 52′ N | 157° 16′ E | 2,194 |
| 0° 53′ N | 157° 08′ E | 2,194 |
| 0° 53′ N | 156° 51′ E | 2,231 |
| 0° 54′ N | 156° 44′ E | 2,231 |
| 0° 54′ N | 156° 35′ E | 2,212 |
| 0° 55′ N | 156° 27′ E | 2,185 |
| 0° 55′ N | 156° 18′ E | 2,130 |
| 0° 55′ N | 156° 11′ E | 2,130 |
| 0° 56′ N | 156° 03′ E | 2,185 |
| 0° 56′ N | 155° 53′ E | 2,295 |
| 0° 57′ N | 155° 50′ E | 2,258 |
| 0° 58′ N | 155° 11′ E | 2,715 |
| 0° 58′ N | 155° 03′ E | 2,772 |
| 0° 59′ N | 154° 55′ E | 2,845 |
| 0° 59′ N | 154° 53′ E | 2,937 |
| 0° 59′ N | 154° 49′ E | 2,827 |
| 0° 59′ N | 154° 47′ E | **1,122** |
| 0° 52′ N | 154° 46′ E | 3,056 |
| 0° 48′ N | 154° 46′ E | 3,075 |
| 1° 05′ N | 154° 30′ E | 3,010 |
| 1° 08′ N | 154° 18′ E | 2,937 |
| 1° 16′ N | 153° 45′ E | *2,486* |
| 1° 17′ N | 153° 38′ E | *2,387* |
| 1° 18′ N | 153° 35′ E | 3,769 |
| 1° 40′ N | 152° 40′ E | 3,677 |
| 1° 42′ N | 152° 25′ E | 4,152 |
| 1° 50′ N | 151° 48′ E | 4,617 |
| 1° 57′ N | 151° 16′ E | 4,953 |
| 1° 58′ N | 151° 10′ E | 4,990 |
| 1° 58′ N | 151° 04′ E | *5,075* |
| 1° 59′ N | 150° 58′ E | *5,093* |
| 2° 03′ N | 150° 42′ E | *5,055* |
| 2° 09′ N | 147° 12′ E | 4,372 |
| 2° 09′ N | 147° 06′ E | 4,427 |
| 2° 08′ N | 147° 00′ E | 4,500 |
| 2° 08′ N | 146° 58′ E | 4,583 |
| 2° 09′ N | 146° 52′ E | 4,602 |
| 2° 09′ N | 146° 51′ E | 4,562 |
| 2° 09′ N | 146° 50′ E | 4,517 |
| 2° 10′ N | 146° 44′ E | 4,553 |
| 2° 16′ N | 145° 47′ E | 4,599 |
| 2° 13′ N | 145° 36′ E | 4,526 |
| 2° 43′ N | 142° 42′ E | 3,769 |
| 2° 44′ N | 142° 38′ E | 3,751 |
| 2° 45′ N | 142° 34′ E | 3,731 |
| 2° 45′ N | 142° 33′ E | 3,713 |
| 2° 42′ N | 139° 06′ E | 4,444 |
| 2° 42′ N | 139° 01′ E | 4,281 |
| 2° 42′ N | 138° 56′ E | 4,435 |
| 2° 46′ N | 137° 15′ E | 4,602 |
| 2° 46′ N | 136° 37′ E | 4,444 |
| 2° 46′ N | 136° 33′ E | 4,481 |
| 2° 46′ N | 135° 07′ E | 4,326 |
| 2° 46′ N | 135° 03′ E | 4,198 |
| 2° 54′ N | 134° 27′ E | 4,123 |
| 2° 58′ N | 134° 14′ E | 4,300 |
| 2° 59′ N | 134° 13′ E | 4,290 |
| 3° 33′ N | 132° 36′ E | 3,278 |
| 3° 39′ N | 132° 25′ E | 3,566 |
| 3° 40′ N | 132° 22′ E | 4,775 |
| 3° 46′ N | 132° 10′ E | 3,556 |
| 3° 47′ N | 132° 09′ E | 3,731 |
| 3° 49′ N | 132° 05′ E | 3,104 |
| 3° 57′ N | 131° 48′ E | 4,691 |
| 4° 22′ N | 130° 59′ E | *5,507* |
| 4° 25′ N | 130° 55′ E | 4,153 |
| 4° 26′ N | 130° 54′ E | 4,189 |
| 4° 27′ N | 130° 53′ E | 4,133 |
| 4° 27′ N | 130° 52′ E | 4,434 |
| 4° 26′ N | 130° 50′ E | 4,131 |
| 4° 26′ N | 130° 45′ E | 4,563 |
| 4° 26′ N | 130° 44′ E | 4,653 |
| 4° 25′ N | 130° 41′ E | 4,579 |
| 4° 24′ N | 130° 34′ E | 4,728 |
| 4° 25′ N | 130° 30′ E | 4,766 |
| 4° 27′ N | 130° 23′ E | 4,869 |
| 4° 28′ N | 130° 16′ E | 4,943 |
| 4° 29′ N | 130° 14′ E | 4,972 |
| 4° 30′ N | 130° 02′ E | 4,990 |
| 4° 31′ N | 129° 58′ E | 5,000 |
| 4° 34′ N | 129° 42′ E | 5,140 |
| 4° 37′ N | 129° 28′ E | 5,243 |
| 4° 44′ N | 128° 32′ E | 5,093 |
| 4° 35′ N | 128° 31′ E | 5,187 |
| 4° 36′ N | 128° 26′ E | 5,554 |
| 4° 36′ N | 128° 26′ E | 5,874 |
| 4° 39′ N | 128° 19′ E | 7,205 |
| 4° 41′ N | 128° 14′ E | 8,297 |
| 4° 43′ N | 128° 07′ E | 8,190 |
| 4° 50′ N | 128° 03′ E | 8,783 |
| 4° 52′ N | 128° 02′ E | 8,432 |
| 4° 58′ N | 127° 55′ E | 8,813 |
| 5° 07′ N | 127° 47′ E | 7,968 |
| 5° 07′ N | 127° 50′ E | 8,288 |
| 5° 07′ N | 127° 53′ E | 8,744 |
| 5° 07′ N | 127° 53′ E | 8,843 |
| 5° 08′ N | 127° 49′ E | 9,029 |
| 5° 18′ N | 127° 44′ E | 9,233 |
| 5° 22′ N | 127° 49′ E | 8,975 |
| 5° 21′ N | 127° 50′ E | 9,165 |
| 5° 20′ N | 127° 51′ E | **9,206** |
| 5° 19′ N | 127° 52′ E | 9,022 |

PROFILE 10

| | | |
|---|---|---|
| 5° 17′ N | 127° 53′ E | **7,662** |
| 3° 19′ N | 127° 46′ E | 2,073 |
| 3° 18′ N | 127° 46′ E | 2,146 |
| 3° 17′ N | 127° 46′ E | 2,223 |
| 3° 16′ N | 127° 46′ E | 2,343 |
| 3° 04′ N | 127° 45′ E | 2,985 |
| 2° 56′ N | 127° 44′ E | 3,278 |
| 2° 45′ N | 127° 44′ E | 3,631 |
| 2° 40′ N | 127° 44′ E | 3,576 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 2° 31′ N | 127° 43′ E | 3,391 |
| 2° 25′ N | 127° 43′ E | 2,819 |
| 0° 57′ N | 127° 11′ E | 3,161 |
| 0° 57′ N | 127° 12′ E | 3,264 |
| 0° 54′ N | 127° 08′ E | 1,872 |
| 0° 46′ S | 126° 22′ E | 2,819 |
| 1° 06′ S | 126° 17′ E | 2,525 |
| 2° 11′ S | 126° 23′ E | 1,824 |
| 2° 22′ S | 126° 19′ E | 2,616 |
| 2° 30′ S | 126° 15′ E | 3,479 |
| 2° 34′ S | 126° 10′ E | 4,779 |
| 2° 45′ S | 125° 24′ E | 5,303 |
| 2° 58′ S | 125° 11′ E | 3,735 |
| 3° 05′ S | 125° 05′ E | 4,322 |
| 3° 12′ S | 124° 59′ E | 5,347 |
| 3° 14′ S | 124° 58′ E | 5,377 |
| 3° 14′ S | 124° 58′ E | 5,408 |
| 4° 00′ S | 124° 20′ E | 4,713 |
| 4° 00′ S | 124° 20′ E | 4,610 |
| 4° 06′ S | 124° 16′ E | 4,684 |
| 4° 06′ S | 124° 16′ E | 4,348 |
| 4° 11′ S | 124° 11′ E | 4,510 |
| 4° 16′ S | 124° 07′ E | 4,638 |
| 4° 22′ S | 124° 03′ E | 4,368 |
| 4° 30′ S | 123° 56′ E | 4,291 |
| 4° 36′ S | 123° 52′ E | 4,803 |
| 4° 38′ S | 123° 50′ E | 4,821 |
| 4° 38′ S | 123° 50′ E | 4,835 |
| 4° 45′ S | 123° 46′ E | 4,674 |
| 4° 47′ S | 123° 44′ E | 4,628 |
| 4° 56′ S | 123° 38′ E | 4,182 |
| 4° 57′ S | 123° 37′ E | 1,951 |
| 4° 57′ S | 123° 36′ E | 1,778 |
| 4° 57′ S | 123° 36′ E | 3,174 |
| 4° 58′ S | 123° 35′ E | 2,601 |
| 5° 47′ S | 123° 10′ E | 4,013 |
| 5° 54′ S | 123° 10′ E | 3,331 |
| 6° 02′ S | 123° 10′ E | 1,860 |
| 6° 24′ S | 123° 10′ E | 3,063 |
| 6° 35′ S | 123° 09′ E | 2,513 |
| 6° 42′ S | 123° 08′ E | 2,397 |
| 6° 50′ S | 123° 07′ E | 1,994 |
| 6° 57′ S | 123° 05′ E | 2,780 |
| 7° 28′ S | 122° 19′ E | 3,294 |
| 7° 32′ S | 122° 12′ E | 2,891 |
| 7° 34′ S | 122° 09′ E | 1,960 |
| 7° 35′ S | 122° 07′ E | 804 |
| 7° 35′ S | 122° 06′ E | 894 |
| 7° 35′ S | 122° 06′ E | 1,379 |
| 7° 35′ S | 122° 05′ E | 1,073 |
| 7° 35′ S | 122° 05′ E | 822 |
| 7° 35′ S | 122° 05′ E | 1,198 |
| 7° 35′ S | 122° 04′ E | **696** |
| 7° 35′ S | 121° 58′ E | 1,063 |
| 7° 58′ S | 121° 38′ E | 4,582 |
| 8° 09′ S | 121° 31′ E | 6,961 |
| 7° 51′ S | 121° 48′ E | 4,401 |
| 7° 55′ S | 121° 44′ E | 3,645 |
| 7° 57′ S | 121° 41′ E | 3,907 |
| 8° 03′ S | 121° 36′ E | 4,554 |
| 8° 02′ S | 121° 35′ E | 3,889 |
| 8° 01′ S | 121° 30′ E | 4,442 |
| 8° 01′ S | 121° 27′ E | 4,296 |
| 8° 00′ S | 121° 24′ E | 4,165 |
| 8° 00′ S | 121° 24′ E | 4,229 |
| 7° 59′ S | 121° 16′ E | 4,238 |
| 7° 58′ S | 121° 09′ E | 4,137 |
| 7° 57′ S | 121° 02′ E | 4,821 |
| 7° 57′ S | 120° 58′ E | 5,000 |
| 7° 46′ S | 120° 46′ E | 5,046 |
| 7° 46′ S | 120° 41′ E | 5,000 |
| 7° 46′ S | 120° 30′ E | 5,009 |
| 7° 46′ S | 120° 20′ E | 4,905 |
| 7° 47′ S | 120° 11′ E | 5,000 |
| 7° 47′ S | 120° 07′ E | 4,990 |
| 7° 47′ S | 120° 00′ E | 4,990 |
| 7° 47′ S | 119° 40′ E | 4,953 |
| 7° 47′ S | 119° 33′ E | 4,981 |
| 7° 48′ S | 119° 28′ E | 4,766 |
| 7° 48′ S | 119° 22′ E | 4,766 |
| 7° 48′ S | 119° 07′ E | 3,681 |
| 8° 07′ S | 117° 46′ E | 1,413 |
| 8° 09′ S | 117° 40′ E | 1,324 |
| 8° 10′ S | 117° 29′ E | 1,362 |
| 8° 10′ S | 117° 25′ E | 1,541 |
| 8° 11′ S | 117° 11′ E | 1,480 |
| 8° 12′ S | 117° 07′ E | 1,507 |
| 8° 12′ S | 116° 59′ E | 1,614 |
| 8° 10′ S | 116° 46′ E | 1,559 |
| 8° 09′ S | 116° 38′ E | 1,541 |
| 7° 53′ S | 115° 10′ E | 1,888 |
| 7° 53′ S | 115° 10′ E | 983 |
| 7° 48′ S | 114° 55′ E | 876 |
| 7° 42′ S | 114° 39′ E | 552 |
| 7° 41′ S | 114° 34′ E | 460 |
| 7° 41′ S | 114° 34′ E | 920 |
| 7° 38′ S | 114° 27′ E | 157 |
| 7° 37′ S | 114° 27′ E | 187 |
| 7° 37′ S | 114° 27′ E | 361 |
| 7° 34′ S | 114° 20′ E | 112 |
| 7° 33′ S | 114° 20′ E | 119 |
| 7° 28′ S | 114° 11′ E | 97 |
| 7° 25′ S | 114° 06′ E | 99 |

PROFILE 11.

| | | |
|---|---|---|
| 10° 16′ S | 112° 02′ E | 3,793 |
| 10° 16′ S | 112° 00′ E | 3,986 |
| 10° 15′ S | 111° 59′ E | 3,775 |
| 10° 15′ S | 111° 57′ E | 3,715 |
| 10° 15′ S | 111° 42′ E | 2,374 |
| 10° 15′ S | 111° 39′ E | 2,210 |
| 10° 16′ S | 111° 33′ E | 3,140 |
| 10° 17′ S | 111° 26′ E | 4,155 |
| 10° 17′ S | 111° 24′ E | 4,350 |
| 10° 18′ N | 111° 23′ W | 3,932 |
| 10° 18′ S | 111° 23′ E | 4,195 |
| 10° 18′ S | 111° 18′ E | 4,543 |
| 10° 18′ S | 111° 17′ E | 4,285 |
| 10° 18′ S | 111° 15′ E | 4,525 |
| 10° 19′ S | 111° 13′ E | 4,220 |
| 10° 19′ S | 111° 10′ E | 5,208 |
| 10° 19′ S | 111° 06′ E | 5,582 |
| 10° 20′ S | 111° 03′ E | 5,870 |
| 10° 21′ S | 110° 57′ E | 6,009 |
| 10° 19′ S | 109° 59′ E | 6,841 |
| 10° 18′ S | 109° 49′ E | 6,943 |
| 10° 18′ S | 109° 46′ E | 6,751 |
| 10° 18′ S | 109° 43′ E | **7,036** |
| 10° 18′ S | 109° 41′ E | 6,617 |
| 10° 18′ S | 109° 41′ E | 6,584 |
| 10° 17′ S | 109° 39′ E | 6,465 |
| 10° 16′ S | 109° 39′ E | 6,293 |
| 10° 15′ S | 109° 39′ E | 5,942 |
| 10° 11′ S | 109° 39′ E | 6,303 |
| 10° 09′ S | 109° 39′ E | 6,200 |
| 10° 08′ S | 109° 39′ E | 6,186 |
| 10° 14′ S | 108° 59′ E | 6,613 |
| 10° 08′ S | 108° 58′ E | 6,864 |
| 10° 01′ S | 108° 57′ E | 6,160 |
| 10° 01′ S | 108° 57′ E | 6,220 |
| 10° 07′ S | 108° 58′ E | 6,846 |
| 10° 07′ S | 108° 56′ E | 6,786 |
| 10° 08′ S | 108° 55′ E | 6,864 |
| 10° 15′ S | 108° 54′ E | 6,499 |
| 10° 15′ S | 108° 54′ E | 6,670 |
| 10° 21′ S | 108° 48′ E | 6,487 |
| 10° 22′ S | 108° 40′ E | 6,080 |
| 10° 23′ S | 108° 31′ E | 4,528 |
| 10° 25′ S | 108° 24′ E | 5,851 |
| 10° 26′ S | 108° 17′ E | 6,033 |
| 10° 27′ S | 108° 09′ E | 6,127 |
| 10° 28′ S | 108° 02′ E | 6,061 |
| 10° 29′ S | 107° 55′ E | 6,156 |
| 10° 30′ S | 107° 50′ E | 5,711 |
| 10° 31′ S | 107° 43′ E | 6,004 |
| 10° 37′ S | 107° 06′ E | *4,249* |
| 10° 37′ S | 107° 02′ E | *3,868* |
| 10° 39′ S | 106° 55′ E | *5,588* |
| 10° 39′ S | 106° 37′ E | *5,701* |
| 10° 41′ S | 106° 37′ E | *5,814* |
| 10° 42′ S | 106° 30′ E | *5,889* |
| 10° 43′ S | 106° 25′ E | 6,099 |
| 10° 45′ S | 106° 17′ E | 5,898 |
| 10° 45′ S | 106° 16′ E | 5,543 |
| 10° 46′ S | 106° 13′ E | 5,114 |
| 10° 46′ S | 106° 10′ E | 5,562 |
| 10° 47′ S | 106° 00′ E | 5,494 |
| 10° 49′ S | 105° 52′ E | 4,883 |
| 10° 49′ S | 105° 44′ E | 4,673 |
| 10° 50′ S | 105° 37′ E | 4,673 |
| 10° 51′ S | 105° 29′ E | 4,785 |
| 10° 52′ S | 105° 18′ E | 4,729 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 10° 54′ S | 105° 01′ E | 4,785 |
| 10° 55′ S | 104° 54′ E | 4,439 |
| 10° 57′ S | 104° 46′ E | *3,013* |
| 10° 57′ S | 104° 38′ E | 5,160 |
| 10° 59′ S | 104° 20′ E | *5,443* |
| 11° 01′ S | 104° 11′ E | *5,490* |
| 11° 02′ S | 104° 03′ E | *2,692* |
| 11° 02′ S | 104° 00′ E | *2,509* |
| 11° 03′ S | 103° 57′ E | 4,050 |
| 11° 04′ S | 103° 45′ E | 5,153 |
| 11° 08′ S | 103° 34′ E | 5,735 |
| 11° 09′ S | 103° 31′ E | 5,688 |
| 11° 14′ S | 103° 15′ E | 5,396 |
| 11° 17′ S | 103° 09′ E | 4,667 |
| 11° 17′ S | 103° 08′ E | 5,256 |
| 11° 20′ S | 103° 01′ E | 5,472 |
| 11° 21′ S | 102° 59′ E | 5,519 |
| 11° 22′ S | 102° 55′ E | 5,144 |
| 11° 22′ S | 102° 54′ E | 5,322 |
| 11° 23′ S | 102° 53′ E | 5,124 |
| 11° 24′ S | 102° 52′ E | 5,528 |
| 11° 28′ S | 102° 19′ E | 5,162 |
| 11° 28′ S | 102° 18′ E | 5,031 |
| 11° 28′ S | 102° 08′ E | 5,115 |
| 11° 25′ S | 102° 01′ E | 5,103 |
| 11° 25′ S | 101° 51′ E | 5,139 |
| 11° 25′ S | 101° 44′ E | 5,130 |
| 11° 25′ S | 101° 37′ E | 5,159 |
| 11° 25′ S | 101° 34′ E | 5,112 |
| 11° 25′ S | 101° 26′ E | 4,821 |
| 11° 25′ S | 101° 22′ E | 4,868 |
| 11° 25′ S | 101° 17′ E | 4,803 |
| 11° 25′ S | 101° 16′ E | 4,853 |
| 11° 25′ S | 101° 09′ E | 4,824 |
| 11° 25′ S | 100° 58′ E | 5,068 |
| 11° 25′ S | 100° 32′ E | 4,787 |
| 11° 25′ S | 100° 25′ E | 3,841 |
| 11° 25′ S | 100° 23′ E | 4,286 |
| 11° 25′ S | 100° 14′ E | 4,693 |
| 11° 25′ S | 100° 04′ E | 4,647 |
| 11° 25′ S | 99° 59′ E | *3,926* |
| 11° 25′ S | 99° 55′ E | 5,115 |
| 11° 25′ S | 99° 53′ E | 5,074 |
| 11° 25′ S | 99° 49′ E | *3,134* |
| 11° 25′ S | 99° 44′ E | 5,449 |
| 11° 25′ S | 99° 38′ E | 5,392 |
| 11° 25′ S | 99° 37′ E | 5,411 |
| 11° 20′ S | 99° 32′ E | 5,224 |
| 11° 20′ S | 99° 26′ E | 4,797 |
| 11° 20′ S | 99° 22′ E | *3,844* |
| 11° 20′ S | 99° 18′ E | 4,582 |
| 11° 20′ S | 99° 12′ E | *2,759* |
| 11° 20′ S | 99° 09′ E | *1,667* |
| 11° 20′ S | 98° 58′ E | *3,844* |
| 11° 19′ S | 98° 52′ E | 5,189 |
| 11° 19′ S | 98° 49′ E | 5,168 |
| 11° 18′ S | 98° 40′ E | 5,374 |
| 11° 17′ S | 98° 27′ E | 5,094 |
| 11° 16′ S | 98° 20′ E | 5,411 |
| 11° 16′ S | 98° 18′ E | 5,130 |
| 11° 16′ S | 98° 11′ E | *3,704* |
| 11° 16′ S | 98° 08′ E | *2,421* |
| 11° 15′ S | 98° 04′ E | 5,037 |
| 11° 15′ S | 97° 58′ E | 4,906 |
| 11° 15′ S | 97° 53′ E | 4,834 |
| 11° 15′ S | 97° 51′ E | 5,293 |
| 11° 15′ S | 97° 49′ E | 4,966 |
| 11° 14′ S | 97° 47′ E | 5,405 |
| 11° 13′ S | 97° 18′ E | 5,189 |
| 11° 12′ S | 97° 13′ E | 4,824 |
| 11° 12′ S | 97° 09′ E | 5,097 |
| 11° 11′ S | 97° 03′ E | 4,966 |
| 11° 11′ S | 96° 58′ E | 4,682 |
| 11° 10′ S | 96° 47′ E | 4,423 |
| 11° 10′ S | 96° 47′ E | 4,407 |
| 11° 10′ S | 96° 44′ E | 4,647 |
| 11° 10′ S | 96° 37′ E | 4,481 |
| 11° 11′ S | 96° 23′ E | 4,064 |
| 11° 12′ S | 96° 17′ E | 4,628 |
| 11° 13′ S | 96° 14′ E | 4,221 |
| 11° 13′ S | 96° 13′ E | 4,880 |
| 11° 13′ S | 96° 12′ E | 5,040 |
| 11° 13′ S | 96° 07′ E | 4,946 |
| 11° 14′ S | 96° 02′ E | 4,828 |
| 11° 14′ S | 95° 58′ E | 4,695 |
| 11° 15′ S | 95° 50′ E | 5,433 |
| 11° 16′ S | 95° 42′ E | 5,536 |
| 11° 16′ S | 95° 37′ E | 5,152 |
| 11° 17′ S | 95° 32′ E | 5,386 |
| 11° 17′ S | 95° 28′ E | 5,133 |
| 11° 18′ S | 95° 21′ E | 5,330 |
| 11° 22′ S | 94° 46′ E | 5,668 |
| 11° 23′ S | 94° 43′ E | 5,386 |
| 11° 23′ S | 94° 42′ E | 5,688 |
| 11° 24′ S | 94° 32′ E | 5,208 |
| 11° 24′ S | 94° 29′ E | 5,500 |
| 11° 25′ S | 94° 19′ E | 5,339 |
| 11° 26′ S | 94° 15′ E | 5,059 |
| 11° 27′ S | 94° 08′ E | 5,302 |
| 11° 29′ S | 94° 05′ E | 5,405 |
| 11° 29′ S | 93° 57′ E | 5,405 |
| 11° 30′ S | 93° 47′ E | 5,484 |
| 11° 30′ S | 93° 42′ E | 5,398 |
| 11° 30′ S | 93° 40′ E | 5,550 |
| 11° 30′ S | 93° 31′ E | 5,588 |
| 11° 30′ S | 93° 23′ E | 5,427 |
| 11° 30′ S | 93° 14′ E | 4,858 |
| 11° 30′ S | 93° 13′ E | 5,700 |
| 11° 30′ S | 93° 04′ E | 5,625 |
| 11° 30′ S | 92° 55′ E | 5,018 |
| 11° 30′ S | 92° 49′ E | 5,897 |
| 11° 30′ S | 92° 00′ E | 5,512 |
| 11° 30′ S | 91° 55′ E | 5,239 |
| 11° 30′ S | 91° 50′ E | 5,222 |
| 11° 30′ S | 91° 49′ E | 5,128 |
| 11° 30′ S | 91° 43′ E | 4,709 |
| 11° 30′ S | 91° 36′ E | 5,334 |
| 11° 30′ S | 91° 29′ E | 4,765 |
| 11° 30′ S | 91° 25′ E | 5,278 |
| 11° 33′ S | 91° 25′ E | 4,980 |
| 11° 32′ S | 91° 18′ E | *3,700* |
| 11° 31′ S | 91° 16′ E | 4,825 |
| 11° 30′ S | 91° 09′ E | 3,663 |
| 11° 30′ S | 91° 07′ E | 4,033 |
| 11° 29′ S | 91° 05′ E | 4,543 |
| 11° 29′ S | 91° 00′ E | *3,969* |
| 11° 28′ S | 90° 57′ E | *3,960* |
| 11° 27′ S | 90° 52′ E | 4,153 |
| 11° 27′ S | 90° 48′ E | 4,999 |
| 11° 26′ S | 90° 46′ E | 4,475 |
| 11° 25′ S | 90° 41′ E | 4,849 |
| 11° 24′ S | 90° 36′ E | 4,762 |
| 11° 23′ S | 90° 27′ E | *5,315* |
| 11° 22′ S | 90° 20′ E | 4,531 |
| 11° 20′ S | 90° 14′ E | *6,335* |
| 11° 20′ S | 90° 12′ E | *5,681* |
| 11° 19′ S | 90° 09′ E | *6,086* |
| 11° 18′ S | 90° 00′ E | *5,735* |
| 11° 17′ S | 89° 55′ E | *5,689* |
| 11° 15′ S | 89° 48′ E | *5,604* |
| 11° 09′ S | 89° 14′ E | *3,703* |
| 11° 08′ S | 89° 04′ E | *2,852* |
| 11° 06′ S | 88° 58′ E | *2,068* |
| 11° 06′ S | 88° 56′ E | *1,905* |
| 11° 04′ S | 88° 46′ E | *2,241* |
| 11° 03′ S | 88° 40′ E | *2,054* |
| 11° 02′ S | 88° 37′ E | *1,982* |
| 11° 02′ S | 88° 34′ E | **1,828** |
| 11° 01′ S | 88° 26′ E | *2,273* |

PROFILE 12.

| | | |
|---|---|---|
| 10° 55′ S | 88° 26′ E | **2,291** |
| 10° 46′ S | 88° 26′ E | *2,785* |
| 10° 36′ S | 88° 25′ E | 4,388 |
| 10° 35′ S | 88° 25′ E | 4,023 |
| 10° 32′ S | 88° 24′ E | 4,107 |
| 10° 23′ S | 88° 24′ E | 4,271 |
| 10° 16′ S | 88° 23′ E | 4,564 |
| 10° 05′ S | 88° 23′ E | 4,756 |
| 10° 02′ S | 88° 23′ E | 4,700 |
| 10° 00′ S | 88° 23′ E | 4,687 |
| 9° 46′ S | 88° 23′ E | 4,556 |
| 9° 44′ S | 88° 23′ E | 4,780 |
| 9° 40′ S | 88° 22′ E | 4,649 |
| 9° 34′ S | 88° 22′ E | 4,682 |
| 9° 29′ S | 88° 22′ E | 4,393 |
| 8° 54′ S | 88° 17′ E | 4,663 |
| 8° 50′ S | 88° 17′ E | 4,727 |
| 8° 49′ S | 88° 17′ E | 4,886 |
| 8° 48′ S | 88° 17′ E | 4,911 |
| 8° 39′ S | 88° 18′ E | 4,724 |
| 8° 30′ S | 88° 20′ E | 4,574 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 8° 27′ S | 88° 20′ E | 4,449 |
| 8° 16′ S | 88° 22′ E | 4,783 |
| 8° 07′ S | 88° 23′ E | 4,607 |
| 8° 06′ S | 88° 24′ E | 4,755 |
| 7° 57′ S | 88° 25′ E | 4,923 |
| 7° 54′ S | 88° 26′ E | 4,569 |
| 7° 51′ S | 88° 27′ E | 4,393 |
| 7° 49′ S | 88° 27′ E | 4,839 |
| 7° 44′ S | 88° 28′ E | 4,626 |
| 7° 38′ S | 88° 29′ E | 4,617 |
| 7° 09′ S | 88° 33′ E | 4,234 |
| 7° 04′ S | 88° 34′ E | 4,206 |
| 7° 01′ S | 88° 35′ E | *3,999* |
| 6° 53′ S | 88° 36′ E | *3,869* |
| 6° 46′ S | 88° 37′ E | *3,003* |
| 6° 36′ S | 88° 39′ E | *2,874* |
| 6° 26′ S | 88° 40′ E | *3,461* |
| 6° 23′ S | 88° 41′ E | *3,512* |
| 6° 24′ S | 88° 43′ E | 4,061 |
| 6° 18′ S | 88° 42′ E | *3,462* |
| 6° 14′ S | 88° 41′ E | 4,580 |
| 6° 06′ S | 88° 39′ E | 4,411 |
| 5° 59′ S | 88° 37′ E | 4,236 |
| 5° 54′ S | 88° 36′ E | 4,301 |
| 5° 50′ S | 88° 35′ E | 4,479 |
| 5° 29′ S | 88° 29′ E | 4,449 |
| 5° 27′ S | 88° 28′ E | 4,624 |
| 5° 21′ S | 88° 27′ E | *5,051* |
| 5° 21′ S | 88° 27′ E | 4,959 |
| 5° 12′ S | 88° 25′ E | **5,127** |
| 5° 09′ S | 88° 24′ E | *5,054* |
| 5° 04′ S | 88° 23′ E | 4,753 |
| 5° 02′ S | 88° 22′ E | 4,639 |
| 5° 01′ S | 88° 22′ E | 4,556 |
| 4° 53′ S | 88° 20′ E | *5,058* |
| 4° 49′ S | 88° 19′ E | *5,029* |
| 4° 47′ S | 88° 17′ E | *5,052* |
| 4° 39′ S | 88° 17′ E | *5,033* |
| 4° 31′ S | 88° 17′ E | 4,930 |
| 4° 24′ S | 88° 17′ E | 4,959 |
| 4° 23′ S | 88° 17′ E | 4,827 |
| 4° 22′ S | 88° 17′ E | 4,939 |
| 4° 16′ S | 88° 17′ E | 4,799 |
| 4° 15′ S | 88° 17′ E | 4,930 |
| 4° 11′ S | 88° 17′ E | 4,818 |
| 4° 02′ S | 88° 17′ E | 4,864 |
| 3° 59′ S | 88° 17′ E | 4,893 |
| 3° 58′ S | 88° 17′ E | 4,771 |
| 3° 54′ S | 88° 17′ E | 4,930 |
| 3° 46′ S | 88° 17′ E | 4,921 |
| 3° 45′ S | 88° 17′ E | 4,846 |
| 3° 23′ S | 88° 17′ E | 4,950 |
| 3° 14′ S | 88° 17′ E | 4,912 |
| 3° 05′ S | 88° 17′ E | 4,827 |
| 2° 58′ S | 88° 17′ E | 4,808 |
| 2° 50′ S | 88° 17′ E | 4,771 |
| 2° 29′ S | 88° 17′ E | 4,827 |
| 2° 31′ S | 88° 20′ E | 4,836 |
| 2° 25′ S | 88° 20′ E | 4,799 |
| 2° 18′ S | 88° 20′ E | 4,789 |
| 2° 16′ S | 88° 20′ E | 4,792 |
| 2° 08′ S | 88° 20′ E | 4,774 |
| 2° 00′ S | 88° 20′ E | 4,783 |
| 1° 51′ S | 88° 20′ E | 4,765 |
| 1° 46′ S | 88° 20′ E | 4,756 |
| 1° 22′ S | 88° 20′ E | 4,101 |
| 1° 14′ S | 88° 20′ E | 4,633 |
| 1° 06′ S | 88° 20′ E | 4,591 |
| 1° 02′ S | 88° 20′ E | 3,694 |
| 0° 58′ S | 88° 20′ E | 4,618 |
| 0° 49′ S | 88° 20′ E | 4,627 |
| 0° 42′ S | 88° 20′ E | 4,491 |
| 0° 34′ S | 88° 20′ E | 4,602 |
| 0° 28′ S | 88° 20′ E | 4,006 |
| 0° 22′ S | 88° 20′ E | 4,266 |
| 0° 14′ S | 88° 20′ E | 4,526 |
| 0° 08′ S | 88° 20′ E | 4,533 |
| 0° 01′ N | 88° 20′ E | 4,496 |
| 0° 02′ N | 88° 20′ E | 4,549 |
| 0° 10′ N | 88° 19′ E | 4,521 |
| 0° 20′ N | 88° 19′ E | 4,521 |
| 0° 28′ N | 88° 18′ E | 4,503 |
| 0° 38′ N | 88° 18′ E | 4,485 |
| 0° 46′ N | 88° 17′ E | 4,474 |
| 0° 52′ N | 88° 17′ E | 4,465 |
| 0° 59′ N | 88° 17′ E | 4,447 |
| 1° 14′ N | 88° 16′ E | 4,400 |
| 1° 21′ N | 88° 15′ E | 4,391 |
| 1° 31′ N | 88° 15′ E | 4,381 |
| 1° 39′ N | 88° 14′ E | 4,359 |
| 1° 48′ N | 88° 13′ E | 4,200 |
| 1° 55′ N | 88° 12′ E | 4,285 |
| 1° 59′ N | 88° 11′ E | 4,299 |
| 2° 02′ N | 88° 09′ E | 4,385 |
| 2° 04′ N | 88° 01′ E | 4,280 |
| 2° 09′ N | 87° 53′ E | 4,290 |
| 2° 14′ N | 87° 46′ E | 4,308 |
| 2° 18′ N | 87° 38′ E | 4,296 |
| 2° 23′ N | 87° 30′ E | 4,287 |
| 2° 28′ N | 87° 23′ E | 4,267 |
| 2° 32′ N | 87° 15′ E | 4,314 |
| 2° 39′ N | 87° 08′ E | 4,287 |
| 2° 41′ N | 87° 01′ E | 4,276 |
| 2° 42′ N | 87° 00′ E | 4,287 |
| 2° 48′ N | 87° 53′ E | 4,276 |
| 2° 48′ N | 87° 53′ E | 4,314 |
| 2° 50′ N | 86° 44′ E | 4,276 |
| 2° 55′ N | 86° 36′ E | 4,267 |
| 2° 58′ N | 86° 28′ E | 4,258 |
| 3° 03′ N | 86° 20′ E | 4,240 |
| 3° 04′ N | 86° 18′ E | 4,228 |
| 3° 04′ N | 86° 17′ E | 4,314 |
| 3° 06′ N | 86° 14′ E | 4,314 |
| 3° 07′ N | 86° 12′ E | 4,228 |
| 3° 11′ N | 86° 04′ E | 4,240 |
| 3° 12′ N | 86° 01′ E | 4,240 |
| 3° 13′ N | 86° 00′ E | 4,249 |
| 3° 16′ N | 85° 53′ E | 4,228 |
| 3° 37′ N | 85° 11′ E | 4,249 |
| 3° 40′ N | 85° 05′ E | 4,219 |
| 3° 41′ N | 85° 02′ E | 3,391 |
| 3° 43′ N | 84° 58′ E | *2,993* |
| 3° 43′ N | 84° 57′ E | 3,048 |
| 3° 44′ N | 84° 56′ E | *2,918* |
| 3° 48′ N | 84° 49′ E | 4,228 |
| 3° 50′ N | 84° 46′ E | 4,186 |
| 3° 50′ N | 84° 46′ E | 4,214 |
| 3° 52′ N | 84° 39′ E | 4,186 |
| 3° 54′ N | 84° 30′ E | 4,204 |
| 3° 56′ N | 84° 21′ E | 4,204 |
| 3° 57′ N | 84° 17′ E | 4,172 |
| 4° 07′ N | 83° 36′ E | 4,154 |
| 4° 08′ N | 83° 34′ E | 4,154 |
| 4° 08′ N | 83° 33′ E | 4,154 |
| 4° 10′ N | 83° 24′ E | 4,139 |
| 4° 12′ N | 83° 16′ E | 4,158 |
| 4° 19′ N | 83° 07′ E | 4,158 |
| 4° 21′ N | 83° 00′ E | 4,145 |
| 4° 24′ N | 82° 53′ E | 4,154 |
| 4° 25′ N | 82° 50′ E | 4,145 |
| 4° 26′ N | 82° 49′ E | 4,210 |
| 4° 26′ N | 82° 49′ E | 4,163 |
| 4° 27′ N | 82° 47′ E | 4,145 |
| 4° 27′ N | 82° 46′ E | 4,210 |
| 4° 28′ N | 82° 45′ E | 4,145 |
| 4° 30′ N | 82° 41′ E | 4,143 |
| 4° 34′ N | 82° 35′ E | 4,154 |
| 4° 34′ N | 82° 35′ E | 4,143 |
| 4° 36′ N | 82° 37′ E | 4,165 |
| 4° 39′ N | 82° 30′ E | 4,147 |
| 4° 41′ N | 82° 20′ E | 4,174 |
| 4° 43′ N | 82° 13′ E | 4,183 |
| 4° 46′ N | 82° 05′ E | 4,193 |
| 4° 49′ N | 81° 57′ E | 4,203 |
| 4° 51′ N | 81° 47′ E | 4,221 |
| 4° 52′ N | 81° 38′ E | 4,230 |
| 4° 52′ N | 81° 37′ E | 4,240 |
| 4° 55′ N | 81° 28′ E | 4,249 |
| 5° 03′ N | 81° 00′ E | 4,314 |
| 5° 05′ N | 80° 52′ E | 4,296 |
| 5° 08′ N | 80° 44′ E | 4,286 |
| 5° 10′ N | 80° 37′ E | 4,240 |
| 5° 13′ N | 80° 28′ E | 4,230 |
| 5° 13′ N | 80° 21′ E | 4,230 |
| 5° 13′ N | 80° 20′ E | 4,249 |
| 5° 20′ N | 80° 19′ E | 4,249 |
| 5° 28′ N | 80° 18′ E | 4,246 |
| 5° 31′ N | 80° 17′ E | 4,030 |
| 5° 40′ N | 80° 16′ E | 3,253 |
| 5° 49′ N | 80° 16′ E | 624 |
| 5° 52′ N | 80° 16′ E | 67 |
| 5° 57′ N | 80° 10′ E | 76 |
| 6° 00′ N | 80° 03′ E | 76 |
| 6° 01′ N | 79° 59′ E | 58 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 6° 03′ N | 79° 56′ E | 642 |
| 6° 06′ N | 79° 49′ E | 1,261 |
| 6° 09′ N | 79° 48′ E | 989 |
| 6° 12′ N | 79° 48′ E | 1,371 |
| 6° 19′ N | 79° 47′ E | 906 |
| 6° 24′ N | 79° 46′ E | 1,088 |
| 6° 29′ N | 79° 45′ E | 113 |
| 6° 35′ N | 79° 45′ E | 56 |
| PROFILE 13. | | |
| 6° 32′ N | 79° 29′ E | **2,052** |
| 6° 27′ N | 79° 25′ E | 2,259 |
| 5° 57′ N | 78° 58′ E | 3,081 |
| 5° 50′ N | 78° 53′ E | 3,210 |
| 5° 43′ N | 78° 47′ E | 3,438 |
| 5° 38′ N | 78° 43′ E | 3,787 |
| 5° 37′ N | 78° 42′ E | 3,731 |
| 5° 32′ N | 78° 38′ E | 3,851 |
| 5° 28′ N | 78° 34′ E | 3,851 |
| 4° 57′ N | 78° 07′ E | 3,191 |
| 4° 51′ N | 78° 02′ E | 2,860 |
| 4° 45′ N | 77° 57′ E | 2,897 |
| 4° 38′ N | 77° 51′ E | 2,823 |
| 4° 32′ N | 77° 45′ E | 2,796 |
| 4° 28′ N | 77° 42′ E | 2,619 |
| 4° 21′ N | 77° 37′ E | 3,077 |
| 4° 19′ N | 77° 35′ E | 3,091 |
| 4° 14′ N | 77° 31′ E | 3,149 |
| 4° 12′ N | 77° 29′ E | 3,159 |
| 4° 08′ N | 77° 26′ E | 3,257 |
| 4° 04′ N | 77° 23′ E | 3,350 |
| 3° 58′ N | 77° 19′ E | 3,516 |
| 3° 52′ N | 77° 14′ E | 3,654 |
| 3° 47′ N | 77° 10′ E | 3,774 |
| 3° 45′ N | 77° 08′ E | 3,866 |
| 3° 11′ N | 76° 43′ E | 3,834 |
| 3° 07′ N | 76° 40′ E | 3,816 |
| 2° 50′ N | 76° 27′ E | 3,890 |
| 2° 44′ N | 76° 22′ E | 3,865 |
| 2° 38′ N | 76° 18′ E | 3,798 |
| 2° 32′ N | 76° 14′ E | 3,767 |
| 2° 26′ N | 76° 10′ E | 3,785 |
| 2° 24′ N | 76° 09′ E | 3,693 |
| 2° 22′ N | 76° 08′ E | 3,322 |
| 2° 20′ N | 76° 07′ E | 3,758 |
| 2° 20′ N | 76° 07′ E | 3,768 |
| 2° 15′ N | 76° 04′ E | 3,674 |
| 2° 08′ N | 76° 01′ E | 3,609 |
| 2° 04′ N | 75° 58′ E | 2,727 |
| 2° 02′ N | 75° 57′ E | 3,478 |
| 1° 58′ N | 75° 55′ E | 3,680 |
| 1° 50′ N | 75° 50′ E | 3,642 |
| 1° 36′ N | 75° 43′ E | 3,596 |
| 1° 30′ N | 75° 40′ E | 3,542 |
| 1° 25′ N | 75° 37′ E | 3,505 |
| 1° 21′ N | 75° 35′ E | 3,532 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 1° 16′ N | 75° 33′ E | 3,505 |
| 1° 11′ N | 75° 30′ E | 3,560 |
| 1° 05′ N | 75° 27′ E | 3,624 |
| 1° 00′ N | 75° 25′ E | 3,735 |
| 0° 57′ N | 75° 23′ E | 3,796 |
| 0° 55′ N | 75° 21′ E | 3,685 |
| 0° 47′ N | 75° 17′ E | 3,814 |
| 0° 46′ N | 75° 16′ E | 3,731 |
| 0° 43′ N | 75° 15′ E | 3.927 |
| 0° 37′ N | 75° 11′ E | 4,048 |
| 0° 37′ N | 75° 11′ E | 4,010 |
| 0° 31′ N | 75° 08′ E | 3,983 |
| 0° 27′ N | 75° 06′ E | 4,109 |
| 0° 26′ N | 75° 05′ E | 4,035 |
| 0° 20′ N | 75° 02′ E | 4,241 |
| 0° 19′ N | 75° 01′ E | 3,628 |
| 0° 12′ N | 74° 57′ E | 4,339 |
| 0° 07′ N | 74° 55′ E | 4,292 |
| 0° 10′ N | 74° 56′ E | 4,241 |
| 0° 03′ N | 74° 53′ E | 4,286 |
| 0° 03′ S | 74° 50′ E | 4,268 |
| 0° 11′ S | 74° 46′ E | 4,268 |
| 0° 12′ S | 74° 45′ E | 4,333 |
| 0° 13′ S | 74° 44′ E | 4,277 |
| 0° 15′ S | 74° 43′ E | 4,076 |
| 0° 20′ S | 74° 40′ E | 3,743 |
| 0° 26′ S | 74° 37′ E | 3,448 |
| 0° 29′ S | 74° 34′ E | 3,283 |
| 0° 32′ S | 74° 32′ E | 3,320 |
| 0° 33′ S | 74° 31′ E | 3,239 |
| 0° 41′ S | 74° 18′ E | 2,963 |
| 0° 46′ S | 74° 12′ E | 2,932 |
| 0° 49′ S | 74° 06′ E | 2,868 |
| 0° 53′ S | 73° 59′ E | 2,859 |
| 0° 57′ S | 73° 54′ E | 2,786 |
| 1° 01′ S | 73° 47′ E | 2,722 |
| 1° 06′ S | 73° 41′ E | 2,610 |
| 1° 09′ S | 73° 36′ E | 2,619 |
| 1° 10′ S | 73° 30′ E | 2,373 |
| 1° 10′ S | 73° 10′ E | 2,236 |
| 1° 10′ S | 73° 06′ E | 2,183 |
| 1° 11′ S | 73° 04′ E | 2,419 |
| 1° 11′ S | 72° 01′ E | 2,363 |
| 1° 11′ S | 72° 54′ E | 2,437 |
| 1° 11′ S | 72° 46′ E | 2,354 |
| 1° 11′ S | 72° 45′ E | 2,437 |
| 1° 11′ S | 72° 43′ E | 2,674 |
| 1° 11′ S | 72° 42′ E | 2,610 |
| 1° 11′ S | 72° 35′ E | 3,801 |
| 1° 11′ S | 72° 30′ E | *4,061* |
| 1° 11′ S | 72° 29′ E | 3,941 |
| 1° 11′ S | 72° 28′ E | *4,098* |
| 1° 11′ S | 72° 20′ E | *4,209* |
| 1° 11′ S | 72° 14′ E | *4,376* |
| 1° 11′ S | 72° 10′ E | 4,015 |
| 1° 11′ S | 72° 07′ E | 4,432 |
| 1° 12′ S | 72° 01′ E | 4,464 |
| 1° 12′ S | 72° 00′ E | 4,438 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 1° 13′ S | 71° 53′ E | 4,355 |
| 1° 13′ S | 71° 49′ E | 3,937 |
| 1° 13′ S | 71° 47′ E | 4,122 |
| 1° 13′ S | 71° 46′ E | 3,956 |
| 1° 14′ S | 71° 39′ E | 4,346 |
| 1° 15′ S | 71° 31′ E | 3,612 |
| 1° 15′ S | 71° 28′ E | 4,429 |
| 1° 15′ S | 71° 22′ E | 3,880 |
| 1° 15′ S | 71° 17′ E | 3,950 |
| 1° 17′ S | 71° 21′ E | 3,710 |
| 1° 19′ S | 71° 06′ E | 4,396 |
| 1° 20′ S | 71° 00′ E | 3,857 |
| 1° 22′ S | 70° 44′ E | 4,248 |
| 1° 23′ S | 70° 38′ E | 4,053 |
| 1° 24′ S | 70° 36′ E | 3,941 |
| 1° 24′ S | 70° 35′ E | 3,693 |
| 1° 24′ S | 70° 33′ E | 3,914 |
| 1° 24′ S | 70° 32′ E | 3,564 |
| 1° 24′ S | 70° 30′ E | 4,025 |
| 1° 25′ S | 70° 29′ E | 3,822 |
| 1° 25′ S | 70° 27′ E | 4,278 |
| 1° 24′ S | 70° 24′ E | 4,064 |
| 1° 24′ S | 70° 22′ E | 4,195 |
| 1° 24′ S | 70° 16′ E | 3,801 |
| 1° 24′ S | 70° 11′ E | *2,989* |
| 1° 24′ S | 70° 08′ E | 4,304 |
| 1° 24′ S | 70° 06′ E | 4,201 |
| 1° 24′ S | 70° 02′ E | 4,393 |
| 1° 24′ S | 70° 01′ E | 4,283 |
| 1° 24′ S | 69° 57′ E | 4,467 |
| 1° 24′ S | 69° 34′ E | 3,272 |
| 1° 24′ S | 69° 29′ E | 3,761 |
| 1° 24′ S | 69° 25′ E | 3,853 |
| 1° 24′ S | 69° 02′ E | 3,650 |
| 1° 24′ S | 69° 00′ E | 3,881 |
| 1° 24′ S | 68° 55′ E | 3,217 |
| 1° 24′ S | 68° 51′ E | *2,859* |
| 1° 24′ S | 68° 50′ E | 3,024 |
| 1° 24′ S | 68° 49′ E | *2,656* |
| 1° 24′ S | 68° 47′ E | 3,428 |
| 1° 24′ S | 68° 46′ E | 3,208 |
| 1° 24′ S | 68° 41′ E | 3,428 |
| 1° 24′ S | 68° 40′ E | 3,853 |
| 1° 24′ S | 68° 37′ E | 3,125 |
| 1° 24′ S | 68° 34′ E | 2,711 |
| 1° 24′ S | 68° 30′ E | 2,786 |
| 1° 24′ S | 68° 29′ E | 3,798 |
| 1° 24′ S | 68° 27′ E | 3,799 |
| 1° 24′ S | 68° 25′ E | 3,610 |
| 1° 24′ S | 68° 24′ E | 3,782 |
| 1° 24′ S | 68° 20′ E | 3,497 |
| 1° 24′ S | 68° 19′ E | 3,625 |
| 1° 24′ S | 68° 18′ E | 3,478 |
| 1° 19′ S | 68° 20′ E | 3,563 |
| 1° 19′ S | 68° 14′ E | 3,478 |
| 1° 19′ S | 68° 10′ E | 3,681 |
| 1° 19′ S | 68° 06′ E | 3,112 |
| 1° 19′ S | 68° 06′ E | 3,276 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 1° 19′ S | 68° 01′ E | 2,450 |
| 1° 19′ S | 68° 00′ E | 2,688 |
| 1° 19′ S | 67° 58′ E | 2,086 |
| 1° 19′ S | 67° 55′ E | 2,688 |
| 1° 19′ S | 67° 51′ E | 2,808 |
| 1° 19′ S | 67° 51′ E | 2,982 |
| 1° 19′ S | 67° 44′ E | 2,477 |
| 1° 19′ S | 67° 37′ E | 2,340 |
| 1° 19′ S | 67° 34′ E | 2,918 |
| 1° 19′ S | 67° 30′ E | 2,605 |
| 1° 19′ S | 67° 23′ E | 4,330 |
| 1° 19′ S | 67° 22′ E | 3,799 |
| 1° 19′ S | 67° 21′ E | 3,976 |
| 1° 19′ S | 67° 03′ E | 3,211 |
| 1° 19′ S | 67° 00′ E | 3,386 |
| 1° 19′ S | 66° 54′ E | 3,055 |
| 1° 19′ S | 66° 46′ E | 3,459 |
| 1° 19′ S | 66° 45′ E | 3,395 |
| 1° 19′ S | 66° 43′ E | 3,726 |
| 1° 19′ S | 66° 39′ E | 3,726 |
| 1° 19′ S | 66° 36′ E | *2,385* |
| 1° 19′ S | 66° 30′ E | 3,459 |
| 1° 19′ S | 66° 25′ E | 3,672 |
| 1° 19′ S | 66° 22′ E | 3,388 |
| 1° 19′ S | 66° 21′ E | 3,762 |
| 1° 19′ S | 66° 16′ E | 4,374 |
| 1° 17′ S | 66° 10′ E | 3,817 |
| 1° 17′ S | 66° 07′ E | 3,670 |
| 1° 17′ S | 66° 05′ E | 3,901 |
| 1° 17′ S | 66° 02′ E | 3,572 |
| 1° 17′ S | 65° 54′ E | 3,315 |
| 1° 17′ S | 65° 47′ E | 4,061 |
| 1° 17′ S | 65° 45′ E | 3,905 |
| 1° 17′ S | 65° 42′ E | 4,098 |
| 1° 17′ S | 65° 40′ E | 3,866 |
| 1° 17′ S | 65° 37′ E | 4,274 |
| 1° 17′ S | 65° 08′ E | 4,348 |
| 1° 18′ S | 65° 04′ E | 4,024 |
| 1° 18′ S | 65° 03′ E | 4,413 |
| 1° 18′ S | 64° 59′ E | 4,385 |
| 1° 18′ S | 64° 57′ E | *3,830* |
| 1° 18′ S | 64° 55′ E | 4,163 |
| 1° 18′ S | 64° 53′ E | *3,683* |
| 1° 18′ S | 64° 46′ E | 4,080 |
| 1° 18′ S | 64° 40′ E | *3,895* |
| 1° 18′ S | 64° 32′ E | *3,849* |
| 1° 18′ S | 64° 25′ E | *3,998* |
| 1° 18′ S | 64° 18′ E | 4,368 |
| 1° 20′ S | 64° 12′ E | *3,721* |
| 1° 20′ S | 64° 09′ E | 4,190 |
| 1° 20′ S | 64° 07′ E | 4,053 |
| 1° 20′ S | 64° 02′ E | 4,426 |
| 1° 20′ S | 64° 02′ E | 4,416 |
| 1° 20′ S | 64° 00′ E | 4,323 |
| 1° 20′ S | 63° 59′ E | 4,574 |
| 1° 20′ S | 63° 58′ E | 4,029 |
| 1° 20′ S | 63° 55′ E | 4,436 |
| 1° 20′ S | 63° 50′ E | *3,680* |
| 1° 20′ S | 63° 48′ E | 4,279 |
| 1° 20′ S | 63° 44′ E | *3,705* |
| 1° 20′ S | 63° 39′ E | 4,657 |
| 1° 20′ S | 63° 37′ E | 4,512 |
| 1° 20′ S | 63° 35′ E | 4,788 |
| 1° 20′ S | 63° 33′ E | 4,094 |
| 1° 20′ S | 63° 31′ E | 4,528 |
| 1° 20′ S | 63° 27′ E | 4,746 |
| 1° 20′ S | 63° 24′ E | *3,639* |
| 1° 20′ S | 63° 20′ E | 4,727 |
| 1° 23′ S | 62° 49′ E | 4,723 |
| 1° 23′ S | 62° 44′ E | 4,711 |
| 1° 23′ S | 62° 41′ E | 4,667 |
| 1° 24′ S | 62° 38′ E | 4,714 |
| 1° 25′ S | 62° 31′ E | 4,705 |
| 1° 25′ S | 62° 31′ E | 4,732 |
| 1° 26′ S | 62° 22′ E | 4,608 |
| 1° 26′ S | 62° 15′ E | 4,523 |
| 1° 27′ S | 62° 08′ E | 4,568 |
| 1° 28′ S | 62° 01′ E | 4,719 |
| 1° 29′ S | 61° 57′ E | 4,667 |
| 1° 29′ S | 61° 57′ E | 4,696 |
| 1° 29′ S | 61° 56′ E | 4,686 |
| 1° 29′ S | 61° 56′ E | 4,732 |
| 1° 29′ S | 61° 52′ E | 4,686 |
| 1° 29′ S | 61° 52′ E | **4,742** |
| 1° 29′ S | 61° 51′ E | 4,658 |
| 1° 30′ S | 61° 47′ E | 4,676 |
| 1° 33′ S | 61° 16′ E | 4,652 |
| 1° 33′ S | 61° 15′ E | 4,630 |
| 1° 33′ S | 61° 13′ E | 4,640 |
| 1° 34′ S | 61° 09′ E | 4,620 |
| 1° 35′ S | 61° 01′ E | 4,602 |
| 1° 35′ S | 60° 58′ E | 4,643 |
| 1° 37′ S | 60° 51′ E | 4,577 |
| 1° 39′ S | 60° 45′ E | 4,577 |
| 1° 39′ S | 60° 44′ E | 4,487 |
| 1° 39′ S | 60° 43′ E | 4,552 |
| 1° 41′ S | 60° 37′ E | 4,561 |
| 1° 43′ S | 60° 29′ E | 4,543 |
| 1° 46′ S | 60° 21′ E | 4,534 |
| 1° 48′ S | 60° 13′ E | 4,496 |
| 1° 50′ S | 60° 05′ E | 4,469 |
| 1° 51′ S | 59° 59′ E | 4,431 |
| 1° 54′ S | 59° 51′ E | 4,478 |
| 1° 55′ S | 59° 44′ E | 4,450 |
| 1° 57′ S | 59° 37′ E | 4,441 |
| 1° 59′ S | 59° 29′ E | 4,431 |
| 2° 10′ S | 58° 53′ E | 4,394 |
| 2° 11′ S | 58° 49′ E | 4,361 |
| 2° 13′ S | 58° 42′ E | 4,357 |
| 2° 13′ S | 58° 42′ E | 4,375 |
| 2° 16′ S | 58° 38′ E | 4,366 |
| 2° 20′ S | 58° 31′ E | 4,366 |
| 2° 24′ S | 58° 23′ E | 4,375 |
| 2° 28′ S | 58° 16′ E | 4,366 |
| 2° 32′ S | 58° 10′ E | 4,366 |
| 2° 35′ S | 58° 03′ E | 4,366 |
| 2° 39′ S | 57° 56′ E | 4,385 |
| 2° 43′ S | 57° 49′ E | 4,348 |
| 2° 47′ S | 57° 43′ E | 4,329 |
| 2° 50′ S | 57° 37′ E | 4,329 |
| 2° 54′ S | 57° 29′ E | 4,311 |
| 2° 57′ S | 57° 23′ E | 4,339 |
| 2° 58′ S | 57° 22′ E | 4,329 |
| 3° 04′ S | 57° 12′ E | 4,329 |
| 3° 08′ S | 57° 05′ E | 4,274 |
| 3° 11′ S | 56° 58′ E | 4,246 |
| 3° 14′ S | 56° 54′ E | 4,218 |
| 3° 16′ S | 56° 50′ E | 4,184 |
| 3° 19′ S | 56° 44′ E | 4,082 |
| 3° 19′ S | 56° 43′ E | 4,096 |
| 3° 21′ S | 56° 34′ E | 3,994 |
| 3° 21′ S | 56° 33′ E | 3,632 |
| 3° 22′ S | 56° 31′ E | 3,947 |
| 3° 25′ S | 56° 21′ E | 3,964 |
| 3° 25′ S | 56° 18′ E | 3,853 |
| 3° 27′ S | 56° 12′ E | 3,724 |
| 3° 29′ S | 56° 06′ E | 3,500 |
| 3° 30′ S | 56° 03′ E | 2,850 |
| 3° 30′ S | 56° 01′ E | 3,355 |
| 3° 32′ S | 55° 55′ E | 3,254 |
| 3° 33′ S | 55° 51′ E | 3,051 |
| 3° 35′ S | 55° 44′ E | 2,041 |
| 3° 35′ S | 55° 39′ E | 1,377 |
| 3° 35′ S | 55° 38′ E | 1,767 |
| 3° 35′ S | 55° 37′ E | 1,423 |
| 3° 35′ S | 55° 35′ E | 1,203 |
| 3° 35′ S | 55° 34′ E | 1,468 |
| 3° 35′ S | 55° 32′ E | 1,084 |
| 3° 35′ S | 55° 20′ E | 1,002 |
| 3° 39′ S | 55° 17′ E | 58 |
| 3° 47′ S | 55° 18′ E | 58 |
| 3° 48′ S | 55° 18′ E | 58 |
| 3° 54′ S | 55° 17′ E | 58 |
| 4° 01′ S | 55° 17′ E | 40 |
| | PROFILE 14. | |
| 4° 17′ S | 55° 40′ E | 49 |
| 4° 10′ S | 55° 37′ E | 49 |
| 4° 02′ S | 55° 35′ E | 67 |
| 3° 00′ S | 55° 35′ E | 3,508 |
| 2° 52′ S | 55° 35′ E | 3,546 |
| 2° 50′ S | 55° 35′ E | 3,481 |
| 2° 49′ S | 55° 35′ E | 3,564 |
| 2° 48′ S | 55° 35′ E | 3,619 |
| 2° 42′ S | 55° 35′ E | 3,710 |
| 2° 41′ S | 55° 35′ E | 3,737 |
| 2° 40′ S | 55° 35′ E | 3,656 |
| 2° 37′ S | 55° 35′ E | 3,636 |
| 2° 32′ S | 55° 35′ E | 4,031 |
| 2° 32′ S | 55° 35′ E | 4,105 |
| 2° 27′ S | 55° 35′ E | 4,181 |
| 2° 20′ S | 55° 35′ E | 4,357 |
| 2° 19′ S | 55° 35′ E | 4,376 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 2° 12′ S | 55° 35′ E | 4,408 |
| 2° 05′ S | 55° 31′ E | 4,404 |
| 1° 58′ S | 55° 27′ E | 4,459 |
| 1° 51′ S | 55° 23′ E | 4,479 |
| 1° 45′ S | 55° 20′ E | 4,506 |
| 0° 58′ S | 54° 52′ E | 4,708 |
| 0° 51′ S | 54° 48′ E | 4,736 |
| 0° 45′ S | 54° 44′ E | 4,662 |
| 0° 43′ S | 54° 43′ E | 4,763 |
| 0° 35′ S | 54° 39′ E | 4,811 |
| 0° 30′ S | 54° 36′ E | 4,818 |
| 0° 26′ S | 54° 34′ E | 4,820 |
| 0° 23′ S | 54° 32′ E | 4,820 |
| 0° 23′ S | 54° 32′ E | 4,836 |
| 0° 22′ S | 54° 32′ E | 4,875 |
| 0° 16′ S | 54° 27′ E | 4,884 |
| 0° 12′ S | 54° 23′ E | 4,913 |
| 0° 07′ S | 54° 28′ E | 4,858 |
| 0° 00′ S | 54° 13′ E | 4,650 |
| 0° 01′ N | 54° 16′ E | 4,906 |
| 0° 08′ N | 54° 10′ E | 4,957 |
| 0° 14′ N | 54° 05′ E | 4,949 |
| 0° 21′ N | 53° 59′ E | 4,939 |
| 0° 27′ N | 53° 53′ E | 4,978 |
| 0° 33′ N | 53° 47′ E | 4,972 |
| 0° 38′ N | 53° 44′ E | 4,972 |
| 0° 43′ N | 53° 40′ E | 4,860 |
| 1° 16′ N | 53° 11′ E | 5,170 |
| 1° 29′ N | 53° 13′ E | 5,124 |
| 1° 38′ N | 53° 11′ E | 5,124 |
| 1° 48′ N | 53° 10′ E | 5,124 |
| 1° 59′ N | 53° 08′ E | 5,118 |
| 2° 05′ N | 53° 07′ E | 5,118 |
| 2° 07′ N | 53° 07′ E | 5,080 |
| 2° 17′ N | 53° 06′ E | 5,127 |
| 2° 23′ N | 53° 05′ E | 5,127 |
| 2° 28′ N | 53° 04′ E | 5,146 |
| 2° 37′ N | 53° 03′ E | 5,146 |
| 2° 40′ N | 53° 02′ E | 5,146 |
| 2° 41′ N | 53° 02′ E | *4,978* |
| 2° 42′ N | 53° 01′ E | *4,978* |
| 2° 44′ N | 53° 01′ E | 5,146 |
| 2° 51′ N | 53° 00′ E | 5,137 |
| 2° 58′ N | 52° 59′ E | 5,143 |
| 3° 39′ N | 52° 53′ E | **5,171** |
| 3° 49′ N | 52° 52′ E | 5,081 |
| 3° 54′ N | 52° 51′ E | *4,749* |
| 3° 56′ N | 52° 50′ E | 5,100 |
| 4° 02′ N | 52° 50′ E | *4,603* |
| 4° 04′ N | 52° 49′ E | 5,015 |
| 4° 11′ N | 52° 48′ E | *3,447* |
| 4° 13′ N | 52° 48′ E | **2,630** |
| 4° 23′ N | 52° 46′ E | 5,117 |
| 4° 28′ N | 52° 45′ E | 5,135 |
| 4° 29′ N | 52° 45′ E | 5,137 |
| 4° 36′ N | 52° 45′ E | 5,118 |
| 4° 46′ N | 52° 46′ E | 5,109 |
| 4° 56′ N | 52° 46′ E | 5,109 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 5° 03′ N | 52° 47′ E | 5,109 |
| 5° 11′ N | 52° 47′ E | 5,109 |
| 5° 20′ N | 52° 47′ E | 5,109 |
| 5° 32′ N | 52° 48′ E | 5,109 |
| 6° 16′ N | 52° 48′ E | 5,141 |
| 6° 25′ N | 52° 49′ E | 5,159 |
| 6° 34′ N | 52° 49′ E | 5,131 |
| 6° 44′ N | 52° 49′ E | 5,131 |
| 6° 54′ N | 52° 49′ E | 5,103 |
| 7° 01′ N | 52° 50′ E | 5,083 |
| 7° 08′ N | 52° 50′ E | 5,083 |
| 7° 09′ N | 52° 50′ E | 5,103 |
| 7° 13′ N | 52° 50′ E | 5,131 |
| 7° 20′ N | 52° 51′ E | 5,131 |
| 7° 27′ N | 52° 52′ E | 5,141 |
| 7° 31′ N | 52° 53′ E | 5,131 |
| 7° 34′ N | 52° 54′ E | *4,459* |
| 7° 39′ N | 52° 55′ E | 5,127 |
| 7° 41′ N | 52° 56′ E | *4,584* |
| 7° 48′ N | 52° 57′ E | 5,090 |
| 7° 53′ N | 52° 58′ E | 5,090 |
| 7° 58′ N | 52° 58′ E | *4,124* |
| 8° 02′ N | 52° 58′ E | 5,070 |
| 8° 04′ N | 52° 58′ E | 5,070 |
| 8° 05′ N | 52° 58′ E | 5,118 |
| 8° 05′ N | 52° 58′ E | 5,098 |
| 8° 14′ N | 52° 58′ E | 5,100 |
| 8° 23′ N | 52° 57′ E | 5,090 |
| 8° 30′ N | 52° 56′ E | 5,080 |
| 8° 37′ N | 52° 55′ E | 5,036 |
| 8° 38′ N | 52° 55′ E | 5,048 |
| 8° 45′ N | 52° 54′ E | 4,983 |
| 8° 55′ N | 52° 53′ E | 4,912 |
| 9° 04′ N | 52° 52′ E | 4,842 |
| 9° 12′ N | 52° 52′ E | 4,767 |
| 9° 17′ N | 52° 51′ E | 4,715 |
| 9° 44′ N | 52° 49′ E | 4,510 |
| 9° 53′ N | 52° 48′ E | 4,379 |
| 9° 57′ N | 52° 48′ E | 4,279 |
| 10° 07′ N | 52° 47′ E | 4,129 |
| 10° 08′ N | 52° 47′ E | 4,144 |
| 10° 24′ N | 52° 30′ E | 3,897 |
| 10° 27′ N | 52° 28′ E | 3,704 |
| 10° 35′ N | 52° 23′ E | 2,509 |
| 10° 37′ N | 52° 21′ E | 2,639 |
| 10° 44′ N | 52° 16′ E | 2,392 |
| 10° 47′ N | 52° 14′ E | 2,091 |
| 10° 53′ N | 52° 10′ E | 1,844 |
| 11° 02′ N | 52° 05′ E | 2,455 |
| 11° 10′ N | 51° 58′ E | 1,942 |
| 11° 22′ N | 51° 53′ E | 1,165 |
| 11° 30′ N | 51° 47′ E | 616 |
| 11° 37′ N | 51° 41′ E | 370 |
| 11° 41′ N | 51° 37′ E | 195 |
| 11° 46′ N | 51° 32′ E | 122 |
| 11° 49′ N | 51° 27′ E | 140 |
| 11° 56′ N | 51° 19′ E | 461 |
| 11° 59′ N | 51° 16′ E | 461 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| PROFILE 15. | | |
| 12° 04′ N | 51° 09′ E | 388 |
| 12° 09′ N | 51° 03′ E | 232 |
| 12° 10′ N | 51° 01′ E | 94 |
| 12° 13′ N | 50° 57′ E | 85 |
| 12° 17′ N | 50° 52′ E | 726 |
| 12° 20′ N | 50° 48′ E | 2,272 |
| 12° 24′ N | 50° 43′ E | 2,363 |
| 12° 30′ N | 50° 35′ E | 2,389 |
| 12° 35′ N | 50° 29′ E | 2,394 |
| 12° 37′ N | 50° 27′ E | 2,277 |
| 12° 48′ N | 49° 57′ E | 2,268 |
| 12° 48′ N | 49° 52′ E | 2,422 |
| 12° 49′ N | 49° 43′ E | 2,076 |
| 12° 49′ N | 49° 41′ E | 2,085 |
| 12° 50′ N | 49° 38′ E | 2,222 |
| 12° 50′ N | 49° 36′ E | 1,939 |
| 12° 50′ N | 49° 35′ E | 2,186 |
| 12° 51′ N | 49° 27′ E | 2,794 |
| 12° 51′ N | 49° 25′ E | *1,900* |
| 12° 51′ N | 49° 22′ E | 2,639 |
| 12° 52′ N | 49° 12′ E | 2,539 |
| 12° 51′ N | 49° 09′ E | 2,246 |
| 12° 49′ N | 49° 04′ E | 1,644 |
| 12° 49′ N | 49° 03′ E | 1,983 |
| 12° 49′ N | 49° 00′ E | 1,772 |
| 12° 48′ N | 49° 00′ E | 1,736 |
| 12° 48′ N | 48° 56′ E | 1,482 |
| 12° 48′ N | 48° 52′ E | 2,191 |
| 12° 45′ N | 48° 42′ E | 3,036 |
| 12° 45′ N | 48° 38′ E | **3,478** |
| 12° 43′ N | 48° 31′ E | 2,567 |
| 12° 43′ N | 48° 39′ E | 2,276 |
| 12° 41′ N | 48° 20′ E | *1,993* |
| 12° 40′ N | 48° 16′ E | 2,331 |
| 12° 27′ N | 47° 16′ E | 1,783 |
| 12° 25′ N | 47° 08′ E | 2,212 |
| 12° 25′ N | 47° 01′ E | 2,440 |
| 12° 22′ N | 46° 52′ E | 1,993 |
| 12° 22′ N | 46° 50′ E | 2,367 |
| 12° 21′ N | 46° 45′ E | 1,556 |
| 12° 21′ N | 46° 41′ E | 2,113 |
| 12° 20′ N | 46° 39′ E | 1,812 |
| 12° 20′ N | 46° 38′ E | *2,122* |
| 12° 18′ N | 46° 27′ E | *2,048* |
| 12° 17′ N | 46° 20′ E | 1,828 |
| 12° 16′ N | 46° 15′ E | 1,464 |
| 12° 15′ N | 46° 06′ E | 1,497 |
| 12° 14′ N | 45° 57′ E | 1,297 |
| 12° 13′ N | 45° 48′ E | 1,242 |
| 12° 12′ N | 45° 42′ E | 1,079 |
| 12° 12′ N | 45° 42′ E | 797 |
| 12° 12′ N | 45° 41′ E | 1,061 |
| 12° 10′ N | 45° 33′ E | 1,023 |
| 12° 10′ N | 45° 31′ E | 913 |
| 12° 10′ N | 45° 25 ′E | 1,078 |
| 12° 09′ N | 45° 17′ E | 968 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 12° 05′ N | 44° 45′ E | 1,146 |
| 12° 05′ N | 44° 44′ E | 894 |
| 12° 05′ N | 44° 38′ E | 1,370 |
| 12° 04′ N | 44° 30′ E | 1,136 |
| 12° 03′ N | 44° 25′ E | 1,474 |
| 12° 02′ N | 44° 20′ E | 972 |
| 12° 01′ N | 44° 13′ E | 862 |
| 12° 01′ N | 44° 10′ E | 278 |
| 12° 01′ N | 44° 10′ E | 1,136 |
| 12° 08′ N | 44° 02′ E | 1,304 |
| 12° 10′ N | 43° 57′ E | 558 |
| 12° 13′ N | 43° 54′ E | 502 |
| 12° 16′ N | 43° 50′ E | 424 |
| 12° 20′ N | 43° 44′ E | 321 |
| 12° 23′ N | 43° 42′ E | 359 |
| 12° 25′ N | 43° 36′ E | 311 |
| 12° 30′ N | 43° 29′ E | 226 |
| 12° 32′ N | 43° 26′ E | 329 |
| 12° 35′ N | 43° 19′ E | 190 |
| 12° 32′ N | 43° 17′ E | 311 |
| 12° 44′ N | 43° 13′ E | 181 |
| 12° 47′ N | 43° 13′ E | 190 |
| 13° 49′ N | 42° 29′ E | 124 |
| 13° 57′ N | 42° 25′ E | 253 |
| 14° 02′ N | 42° 21′ E | 277 |
| 14° 10′ N | 42° 21′ E | 277 |
| 14° 10′ N | 42° 20′ E | 351 |
| 14° 17′ N | 42° 20′ E | 415 |
| 14° 21′ N | 42° 19′ E | 206 |
| 14° 59′ N | 42° 05′ E | 497 |
| 15° 01′ N | 42° 03′ E | 497 |
| 15° 03′ N | 42° 02′ E | 543 |
| 15° 09′ N | 41° 58′ E | 572 |
| 15° 17′ N | 41° 54′ E | 936 |
| 15° 24′ N | 41° 50′ E | 982 |
| 15° 31′ N | 41° 46′ E | 738 |
| 15° 36′ N | 41° 42′ E | 729 |
| 15° 39′ N | 41° 39′ E | 1,277 |
| 15° 43′ N | 41° 41′ E | 1,304 |
| 15° 45′ N | 41° 45′ E | 636 |
| 15° 45′ N | 41° 44′ E | 757 |
| 15° 46′ N | 41° 44′ E | 588 |
| 15° 47′ N | 41° 43′ E | 1,276 |
| 15° 50′ N | 41° 40′ E | 962 |
| 15° 53′ N | 41° 36′ E | 1,566 |
| 15° 58′ N | 41° 35′ E | 1,697 |
| 15° 59′ N | 41° 34′ E | 1,106 |
| 16° 00′ N | 41° 33′ E | 1,383 |
| 16° 05′ N | 41° 29′ E | 1,659 |
| 16° 15′ N | 41° 20′ E | 1,179 |
| 16° 17′ N | 41° 18′ E | 915 |
| 16° 19′ N | 41° 16′ E | 1,302 |
| 16° 24′ N | 41° 11′ E | 1,338 |
| 16° 29′ N | 41° 06′ E | 1,912 |
| 16° 35′ N | 41° 01′ E | 1,376 |
| 16° 40′ N | 40° 56′ E | 1,245 |
| 16° 43′ N | 40° 54′ E | 991 |
| 17° 21′ N | 40° 20′ E | 1,245 |
| 17° 23′ N | 40° 19′ E | 1,218 |
| 17° 29′ N | 40° 13′ E | 991 |
| 17° 40′ N | 40° 07′ E | 1,055 |
| 17° 46′ N | 40° 04′ E | 1,026 |
| 17° 47′ N | 40° 04′ E | 821 |
| 17° 50′ N | 40° 02′ E | 1,048 |
| 17° 57′ N | 39° 58′ E | 1,270 |
| 18° 06′ N | 39° 53′ E | 1,308 |
| 18° 13′ N | 39° 49′ E | 1,393 |
| 18° 19′ N | 39° 46′ E | 1,300 |
| 18° 22′ N | 39° 44′ E | 1,521 |
| 18° 30′ N | 39° 40′ E | 1,064 |
| 18° 35′ N | 39° 38′ E | 1,666 |
| 18° 39′ N | 39° 35′ E | 1,853 |
| 20° 58′ N | 38° 07′ E | 1,816 |
| 20° 59′ N | 38° 07′ E | 2,156 |
| 21° 02′ N | 38° 07′ E | 1,609 |
| 21° 09′ N | 38° 07′ E | 1,842 |
| 21° 10′ N | 38° 07′ E | 1,928 |
| 21° 16′ N | 38° 06′ E | 1,730 |
| 21° 19′ N | 38° 05′ E | 1,903 |
| 21° 20′ N | 38° 04′ E | 1,723 |
| 21° 22′ N | 38° 03′ E | 1,864 |
| 22° 57′ N | 37° 35′ E | 1,156 |
| 23° 08′ N | 37° 29′ E | 1,110 |
| 23° 09′ N | 37° 28′ E | 1,044 |
| 23° 15′ N | 37° 24′ E | 844 |
| 23° 22′ N | 37° 23′ E | 881 |
| 23° 24′ N | 37° 22′ E | 872 |
| 23° 40′ N | 37° 10′ E | 881 |
| 24° 31′ N | 36° 24′ E | 1,108 |
| 24° 33′ N | 36° 23′ E | 1,091 |
| 24° 36′ N | 36° 20′ E | 1,091 |
| 24° 38′ N | 36° 19′ E | 1,109 |
| 24° 42′ N | 36° 15′ E | 1,091 |
| 24° 47′ N | 36° 11′ E | 1,051 |
| 24° 49′ N | 36° 03′ E | 985 |
| 24° 52′ N | 36° 02′ E | 987 |
| 24° 54′ N | 36° 01′ E | 674 |
| 24° 55′ N | 36° 00′ E | 731 |
| 24° 58′ N | 35° 58′ E | 674 |
| 25° 02′ N | 35° 56′ E | 581 |
| 25° 06′ N | 35° 53′ E | 760 |
| 25° 10′ N | 35° 50′ E | 815 |
| 25° 14′ N | 35° 47′ E | 881 |
| 25° 19′ N | 35° 43′ E | 937 |
| 25° 26′ N | 35° 38′ E | 882 |
| 25° 55′ N | 35° 16′ E | 1,110 |
| 25° 57′ N | 35° 15′ E | 987 |
| 25° 58′ N | 35° 14′ E | 1,023 |
| 25° 58′ N | 35° 13′ E | 976 |
| 26° 25′ N | 34° 52′ E | 976 |
| 26° 26′ N | 34° 51′ E | 957 |
| 26° 26′ N | 34° 51′ E | 939 |
| 26° 31′ N | 34° 48′ E | 973 |
| 26° 35′ N | 34° 46′ E | 936 |
| 26° 42′ N | 34° 42′ E | 936 |
| 26° 44′ N | 34° 40′ E | 825 |
| 26° 46′ N | 34° 39′ E | 1,002 |
| 26° 52′ N | 34° 36′ E | 936 |
| 27° 00′ N | 34° 30′ E | 900 |
| 27° 06′ N | 34° 26′ E | 955 |
| 27° 11′ N | 34° 21′ E | 919 |
| 27° 14′ N | 34° 20′ E | 1,021 |
| 27° 15′ N | 34° 20′ E | 844 |
| 27° 22′ N | 34° 17′ E | 1,030 |
| 27° 23′ N | 34° 17′ E | 919 |
| 27° 23′ N | 34° 17′ E | 1,058 |
| 27° 28′ N | 34° 15′ E | 907 |

PROFILE 16.

| | | |
|---|---|---|
| 31° 50′ N | 32° 30′ E | 337 |
| 31° 49′ N | 32° 20′ E | 96 |
| 31° 49′ N | 32° 19′ E | 96 |
| 31° 48′ N | 32° 07′ E | 87 |
| 31° 55′ N | 32° 07′ E | 244 |
| 31° 39′ N | 30° 17′ E | 28 |
| 31° 40′ N | 30° 17′ E | 37 |
| 31° 44′ N | 30° 17′ E | 60 |
| 31° 50′ N | 30° 16′ E | 60 |
| 31° 56′ N | 30° 16′ E | 124 |
| 32° 04′ N | 30° 15′ E | 445 |
| 32° 10′ N | 30° 14′ E | 1,174 |
| 32° 12′ N | 30° 14′ E | 1,207 |
| 32° 20′ N | 30° 19′ E | 1,409 |
| 32° 28′ N | 30° 24′ E | 1,613 |
| 32° 34′ N | 30° 29′ E | 1,838 |
| 32° 36′ N | 30° 31′ E | 1,926 |
| 32° 44′ N | 30° 36′ E | 2,062 |
| 32° 44′ N | 30° 36′ E | 2,043 |
| 32° 51′ N | 30° 41′ E | 2,288 |
| 32° 59′ N | 30° 46′ E | 2,345 |
| 33° 08′ N | 30° 52′ E | 2,438 |
| 33° 46′ N | 31° 18′ E | 2,457 |
| 33° 47′ N | 31° 19′ E | 2,543 |
| 33° 48′ N | 31° 19′ E | 2,449 |
| 33° 50′ N | 31° 20′ E | 2,345 |
| 33° 50′ N | 31° 20′ E | 2,608 |
| 33° 50′ N | 31° 19′ E | 2,513 |
| 33° 50′ N | 31° 18′ E | 2,420 |
| 33° 50′ N | 31° 13′ E | 2,531 |
| 33° 50′ N | 31° 11′ E | 2,382 |
| 33° 51′ N | 31° 02′ E | 2,459 |
| 33° 51′ N | 31° 00′ E | 2,674 |
| 33° 51′ N | 30° 59′ E | 2,543 |
| 33° 51′ N | 30° 56′ E | 2,468 |
| 33° 51′ N | 30° 57′ E | 2,618 |
| 33° 51′ N | 30° 55′ E | 2,655 |
| 33° 51′ N | 30° 49′ E | 2,579 |
| 33° 51′ N | 30° 40′ E | 2,703 |
| 33° 51′ N | 30° 39′ E | 2,655 |
| 33° 51′ N | 30° 36′ E | 2,834 |
| 33° 51′ N | 30° 32′ E | 2,777 |
| 33° 51′ N | 30° 28′ E | 2,834 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 33° 51′ N | 30° 24′ E | 3,012 |
| 33° 51′ N | 30° 14′ E | 3,083 |
| 33° 52′ N | 30° 10′ E | 2,924 |
| 33° 52′ N | 30° 04′ E | 2,990 |
| 33° 52′ N | 29° 56′ E | 2,915 |
| 33° 52′ N | 29° 47′ E | 2,980 |
| 33° 52′ N | 29° 38′ E | 3,015 |
| 33° 52′ N | 29° 30′ E | 3,090 |
| 33° 52′ N | 28° 32′ E | 2,707 |
| 33° 52′ N | 28° 31′ E | 3,024 |
| 33° 52′ N | 28° 28′ E | 2,669 |
| 33° 53′ N | 28° 25′ E | 2,744 |
| 33° 53′ N | 28° 24′ E | 2,856 |
| 33° 53′ N | 28° 20′ E | 2,631 |
| 33° 53′ N | 28° 18′ E | 2,828 |
| 33° 53′ N | 28° 17′ E | 2,631 |
| 33° 53′ N | 28° 17′ E | 2,796 |
| 33° 53′ N | 28° 16′ E | 2,753 |
| 33° 53′ N | 28° 11′ E | 2,641 |
| 33° 53′ N | 28° 07′ E | 2,950 |
| 33° 53′ N | 28° 05′ E | 2,913 |
| 33° 53′ N | 28° 03′ E | 2,744 |
| 33° 53′ N | 27° 59′ E | 2,688 |
| 33° 53′ N | 27° 58′ E | 2,931 |
| 33° 53′ N | 27° 57′ E | 2,699 |
| 33° 53′ N | 27° 55′ E | 2,884 |
| 33° 53′ N | 27° 52′ E | 2,580 |
| 33° 53′ N | 27° 51′ E | 2,669 |
| 33° 53′ N | 27° 50′ E | 2,491 |
| 33° 53′ N | 27° 48′ E | 2,790 |
| 33° 53′ N | 27° 44′ E | 2,492 |
| 33° 53′ N | 27° 43′ E | 2,669 |
| 33° 53′ N | 27° 35′ E | 2,425 |
| 33° 53′ N | 27° 30′ E | 2,547 |
| 33° 53′ N | 27° 25′ E | 2,463 |
| 33° 53′ N | 27° 16′ E | 2,453 |
| 33° 53′ N | 27° 07′ E | 2,631 |
| 33° 53′ N | 26° 56′ E | 2,604 |
| 33° 53′ N | 26° 45′ E | 2,781 |
| 33° 53′ N | 26° 11′ E | 2,856 |
| 33° 53′ N | 26° 08′ E | 2,875 |
| 33° 53′ N | 26° 07′ E | 2,904 |
| 33° 56′ N | 26° 08′ E | 3,025 |
| 34° 01′ N | 26° 08′ E | 3,354 |
| 34° 11′ N | 26° 09′ E | 2,202 |
| 34° 22′ N | 26° 10′ E | 3,641 |
| 34° 23′ N | 26° 10′ E | 3,735 |
| 34° 25′ N | 26° 09′ E | **4,342** |
| 34° 30′ N | 26° 03′ E | 3,225 |
| 34° 36′ N | 25° 56′ E | 2,626 |
| 34° 36′ N | 25° 54′ E | 2,662 |
| 34° 31′ N | 25° 49′ E | 2,294 |
| 34° 27′ N | 25° 43′ E | 1,734 |
| 34° 25′ N | 25° 41′ E | 1,520 |
| 34° 23′ N | 25° 38′ E | 1,697 |
| 34° 23′ N | 25° 34′ E | 1,574 |
| 34° 21′ N | 25° 27′ E | *3,131* |
| 34° 21′ N | 25° 22′ E | 2,530 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 34° 20′ N | 25° 20′ E | 2,228 |
| 34° 20′ N | 25° 15′ E | 2,474 |
| 34° 12′ N | 24° 19′ E | 2,442 |
| 34° 11′ N | 24° 11′ E | 2,095 |
| 34° 11′ N | 24° 11′ E | 2,151 |
| 34° 16′ N | 24° 05′ E | 1,909 |
| 34° 18′ N | 24° 02′ E | 2,255 |
| 34° 21′ N | 23° 57′ E | 1,964 |
| 34° 24′ N | 23° 52′ E | 2,095 |
| 34° 24′ N | 23° 52′ E | 2,113 |
| 34° 29′ N | 23° 54′ E | 1,899 |
| 34° 36′ N | 23° 46′ E | *3,144* |
| 34° 40′ N | 23° 41′ E | *3,542* |
| 34° 39′ N | 23° 41′ E | *3,542* |
| 34° 43′ N | 23° 38′ E | 3,049 |
| 34° 50′ N | 23° 30′ E | 2,974 |
| 34° 50′ N | 23° 30′ E | 2,984 |
| 34° 55′ N | 23° 19′ E | 2,993 |
| 35° 00′ N | 23° 10′ E | 3,181 |
| 35° 03′ N | 23° 05′ E | 3,694 |
| 35° 05′ N | 23° 01′ E | 2,637 |
| 35° 10′ N | 22° 50′ E | 3,632 |
| 35° 15′ N | 22° 40′ E | 3,728 |
| 35° 18′ N | 22° 35′ E | 3,803 |
| 35° 19′ N | 22° 33′ E | 3,471 |
| 35° 20′ N | 22° 31′ E | 3,908 |
| 35° 25′ N | 22° 22′ E | 3,728 |
| 35° 30′ N | 22° 12′ E | 3,689 |
| 35° 35′ N | 22° 03′ E | 3,822 |
| 35° 41′ N | 21° 53′ E | 4,136 |
| 35° 45′ N | 21° 45′ E | 3,955 |
| 35° 49′ N | 21° 37′ E | 3,876 |
| 35° 50′ N | 21° 42′ E | 3,252 |
| 35° 53′ N | 21° 50′ E | 3,611 |
| 35° 53′ N | 21° 54′ E | 3,572 |
| 35° 51′ N | 21° 53′ E | 3,648 |
| 35° 52′ N | 21° 54′ E | 3,633 |
| 35° 52′ N | 21° 54′ E | 3,785 |
| 35° 48′ N | 21° 52′ E | 3,272 |
| 35° 42′ N | 21° 50′ E | 4,231 |
| 35° 40′ N | 21° 49′ E | 4,221 |
| 35° 41′ N | 21° 41′ E | 4,202 |
| 35° 42′ N | 21° 38′ E | 3,728 |
| 35° 43′ N | 21° 27′ E | 3,657 |
| 35° 44′ N | 21° 23′ E | 4,104 |
| 35° 44′ N | 21° 18′ E | 3,620 |
| 35° 44′ N | 21° 17′ E | 4,046 |
| 35° 44′ N | 21° 15′ E | 3,747 |
| 35° 44′ N | 21° 14′ E | 4,085 |
| 35° 45′ N | 21° 05′ E | 3,399 |
| 35° 46′ N | 20° 56′ E | 2,885 |
| 35° 47′ N | 20° 51′ E | 2,834 |
| 35° 47′ N | 20° 40′ E | 2,909 |
| 35° 47′ N | 20° 40′ E | 3,116 |
| 35° 47′ N | 20° 39′ E | 2,946 |
| 35° 48′ N | 20° 33′ E | 2,795 |
| 35° 49′ N | 20° 26′ E | 3,081 |
| 35° 50′ N | 20° 17′ E | 3,100 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 35° 51′ N | 20° 19′ E | 3,094 |
| 35° 51′ N | 20° 02′ E | 3,235 |
| 36° 16′ N | 17° 39′ E | 3,792 |
| 36° 18′ N | 17° 27′ E | 3,471 |
| 36° 12′ N | 17° 28′ E | 3,542 |
| 36° 17′ N | 17° 21′ E | 3,467 |
| 37° 28′ N | 15° 57′ E | 2,363 |
| 37° 30′ N | 15° 55′ E | 2,083 |
| 37° 29′ N | 15° 52′ E | 2,325 |
| 37° 29′ N | 15° 50′ E | 2,288 |
| 37° 30′ N | 15° 41′ E | 2,120 |
| 37° 32′ N | 15° 36′ E | 2,113 |
| 37° 32′ N | 15° 33′ E | 2,101 |
| 37° 33′ N | 15° 28′ E | 1,973 |
| 37° 35′ N | 15° 20′ E | 2,027 |
| 37° 36′ N | 15° 20′ E | 2,045 |
| 37° 38′ N | 15° 20′ E | 1,879 |
| 37° 39′ N | 15° 21′ E | 2,010 |
| 39° 20′ N | 14° 10′ E | 3,481 |
| 39° 22′ N | 14° 06′ E | 3,492 |
| 39° 23′ N | 14° 04′ E | 3,320 |
| 39° 23′ N | 14° 04′ E | 3,501 |
| 39° 25′ N | 14° 04′ E | 3,520 |
| 39° 28′ N | 13° 53′ E | 3,506 |
| 39° 26′ N | 13° 55′ E | 3,487 |
| 39° 32′ N | 13° 44′ E | 2,987 |
| 39° 30′ N | 13° 44′ E | 3,072 |
| 39° 33′ N | 13° 44′ E | 3,165 |
| 39° 37′ N | 13° 44′ E | 2,549 |
| 39° 42′ N | 13° 45′ E | 2,140 |
| 39° 50′ N | 13° 45′ E | 2,727 |
| 39° 56′ N | 13° 45′ E | 2,698 |
| 40° 05′ N | 13° 45′ E | 1,685 |
| 40° 06′ N | 13° 45′ E | 1,683 |
| 40° 13′ N | 13° 45′ E | 1,296 |
| 40° 16′ N | 13° 44′ E | 1,453 |
| 40° 25′ N | 13° 44′ E | 1,194 |
| 40° 24′ N | 13° 42′ E | 1,240 |
| 40° 22′ N | 13° 31′ E | 2,156 |
| 40° 20′ N | 13° 19′ E | 2,668 |
| 40° 18′ N | 13° 12′ E | 2,846 |
| 40° 14′ N | 12° 55′ E | 3,576 |
| 40° 09′ N | 12° 38′ E | 3,611 |
| 40° 13′ N | 12° 16′ E | 2,346 |
| 40° 13′ N | 12° 13′ E | 3,375 |
| 40° 13′ N | 12° 13′ E | 2,309 |
| 40° 12′ N | 12° 17′ E | 3,643 |
| 40° 11′ N | 12° 19′ E | 3,643 |
| 40° 15′ N | 12° 16′ E | 2,610 |
| 40° 17′ N | 12° 14′ E | 3,576 |
| 40° 18′ N | 12° 13′ E | 3,591 |
| 40° 19′ N | 12° 12′ E | 2,834 |
| 40° 24′ N | 12° 06′ E | 3,362 |
| 40° 28′ N | 12° 02′ E | 2,853 |
| 40° 34′ N | 11° 53′ E | 2,451 |
| 40° 39′ N | 11° 46′ E | 1,894 |
| 40° 40′ N | 11° 45′ E | *1,453* |
| 40° 41′ N | 11° 44′ E | *1,453* |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 40° 43′ N | 11° 42′ E | 2,063 |
| 40° 47′ N | 11° 35′ E | 2,490 |
| 40° 54′ N | 11° 28′ E | 2,166 |
| 40° 59′ N | 11° 20′ E | 1,333 |
| 41° 04′ N | 11° 14′ E | 1,576 |
| 41° 08′ N | 11° 09′ E | 1,500 |
| 41° 09′ N | 11° 08′ E | 1,212 |
| 41° 12′ N | 11° 04′ E | 867 |
| 41° 18′ N | 10° 55′ E | 1,258 |
| 41° 21′ N | 10° 50′ E | 1,500 |
| 41° 28′ N | 10° 42′ E | 1,165 |
| 41° 33′ N | 10° 35′ E | 998 |
| 41° 37′ N | 10° 30′ E | 1,426 |
| 41° 43′ N | 10° 22′ E | 765 |
| 41° 47′ N | 10° 17′ E | 1,107 |
| 41° 53′ N | 10° 09′ E | 756 |
| 41° 56′ N | 10° 05′ E | **635** |
| 43° 33′ N | 7° 51′ E | 2,340 |
| 43° 32′ N | 7° 45′ E | 1,795 |
| 43° 31′ N | 7° 36′ E | 1,833 |

PROFILE 17.

| | | |
|---|---|---|
| 42° 56′ N | 7° 13′ E | 2,474 |
| 42° 49′ N | 7° 12′ E | 2,531 |
| 42° 46′ N | 7° 11′ E | 2,599 |
| 42° 39′ N | 7° 10′ E | 2,597 |
| 42° 38′ N | 7° 10′ E | 2,637 |
| 42° 37′ N | 7° 10′ E | 2,615 |
| 42° 32′ N | 7° 06′ E | 2,569 |
| 42° 30′ N | 7° 05′ E | 2,663 |
| 42° 20′ N | 7° 00′ E | 2,698 |
| 42° 16′ N | 6° 57′ E | 2,707 |
| 42° 10′ N | 6° 54′ E | 2,707 |
| 42° 02′ N | 6° 50′ E | 2,669 |
| 41° 55′ N | 6° 46′ E | 2,678 |
| 40° 33′ N | 6° 03′ E | 2,783 |
| 40° 25′ N | 5° 56′ E | 2,792 |
| 40° 20′ N | 5° 50′ E | 2,811 |
| 40° 15′ N | 5° 45′ E | **2,840** |
| 40° 10′ N | 5° 39′ E | 2,821 |
| 40° 08′ N | 5° 37′ E | 2,811 |
| 40° 01′ N | 5° 30′ E | 2,831 |
| 39° 55′ N | 5° 23′ E | 2,801 |
| 39° 48′ N | 5° 16′ E | 2,773 |
| 38° 34′ N | 3° 56′ E | **2,422** |
| 38° 30′ N | 3° 52′ E | 2,571 |
| 38° 22′ N | 3° 27′ E | 2,726 |
| 38° 21′ N | 3° 25′ E | 2,755 |
| 38° 21′ N | 3° 24′ E | 2,765 |
| 38° 18′ N | 3° 16′ E | 2,743 |
| 38° 15′ N | 3° 09′ E | 2,753 |
| 37° 27′ N | 1° 05′ E | 2,783 |
| 37° 23′ N | 0° 56′ E | 2,766 |
| 37° 17′ N | 0° 47′ E | 2,771 |
| 37° 12′ N | 0° 39′ E | 2,734 |
| 37° 07′ N | 0° 30′ E | 2,744 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 37° 02′ N | 0° 20′ E | 2,715 |
| 36° 57′ N | 0° 11′ E | 2,705 |
| 36° 51′ N | 0° 02′ E | 2,705 |
| 36° 46′ N | 0° 09′ W | 2,696 |
| 36° 42′ N | 0° 18′ W | 2,744 |
| 36° 38′ N | 0° 28′ W | 2,677 |
| 36° 38′ N | 0° 29′ W | 2,639 |
| 36° 36′ N | 0° 32′ W | 2,677 |
| 36° 35′ N | 0° 35′ W | 2,677 |
| 36° 03′ N | 1° 48′ W | *2,046* |
| 36° 00′ N | 1° 57′ W | 1,981 |
| 35° 59′ N | 2° 00′ W | 1,859 |
| 35° 59′ N | 2° 02′ W | 1,850 |
| 35° 58′ N | 2° 02′ W | 1,737 |
| 35° 58′ N | 2° 03′ W | 1,746 |
| 35° 58′ N | 2° 05′ W | 1,522 |
| 35° 57′ N | 2° 08′ W | 1,925 |
| 35° 56′ N | 2° 13′ W | 1,681 |
| 35° 54′ N | 2° 20′ W | 1,329 |
| 35° 54′ N | 2° 22′ W | 1,329 |
| 35° 53′ N | 2° 30′ W | 1,218 |
| 35° 52′ N | 2° 37′ W | 1,198 |
| 35° 50′ N | 2° 45′ W | 1,178 |
| 35° 40′ N | 3° 51′ W | 1,364 |
| 35° 36′ N | 3° 56′ W | 1,215 |
| 35° 32′ N | 4° 00′ W | 440 |
| 35° 30′ N | 4° 04′ W | 322 |
| 35° 30′ N | 4° 07′ W | 605 |
| 35° 30′ N | 4° 13′ W | 577 |
| 35° 31′ N | 4° 17′ W | 494 |
| 35° 32′ N | 4° 24′ W | 457 |
| 35° 37′ N | 4° 28′ W | 476 |
| 35° 42′ N | 4° 30′ W | 513 |
| 35° 47′ N | 4° 32′ W | 559 |
| 35° 52′ N | 4° 34′ W | 550 |
| 35° 55′ N | 4° 35′ W | 623 |
| 36° 02′ N | 4° 37′ W | 867 |

PROFILE 18.

| | | |
|---|---|---|
| 35° 53′ N | 5° 55′ W | 396 |
| 35° 52′ N | 6° 02′ W | 561 |
| 35° 52′ N | 6° 04′ W | 385 |
| 35° 50′ N | 6° 13′ W | 420 |
| 35° 49′ N | 6° 23′ W | 407 |
| 35° 48′ N | 6° 33′ W | 499 |
| 35° 46′ N | 6° 43′ W | 590 |
| 35° 45′ N | 6° 48′ W | 753 |
| 35° 04′ N | 7° 36′ W | 1,356 |
| 34° 57′ N | 7° 43′ W | 1,579 |
| 34° 57′ N | 7° 43′ W | 1,524 |
| 34° 57′ N | 7° 43′ W | 1,602 |
| 34° 57′ N | 7° 44′ W | 1,540 |
| 34° 50′ N | 8° 01′ W | 2,234 |
| 33° 48′ N | 10° 49′ W | 4,383 |
| 33° 47′ N | 10° 51′ W | 4,391 |
| 33° 44′ N | 10° 57′ W | 4,372 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 33° 39′ N | 11° 05′ W | 4,383 |
| 33° 34′ N | 11° 14′ W | 4,280 |
| 33° 26′ N | 11° 26′ W | 4,180 |
| 33° 20′ N | 11° 36′ W | 4,086 |
| 33° 14′ N | 11° 47′ W | 4,005 |
| 33° 08′ N | 11° 58′ W | 3,967 |
| 33° 02′ N | 12° 07′ W | 3,927 |
| 32° 55′ N | 12° 19′ W | 3,875 |
| 32° 48′ N | 12° 29′ W | 3,700 |
| 32° 46′ N | 12° 32′ W | 3,560 |
| 32° 43′ N | 12° 40′ W | 3,803 |
| 32° 37′ N | 12° 49′ W | 4,005 |
| 30° 26′ N | 16° 48′ W | 4,108 |
| 30° 22′ N | 16° 56′ W | 4,154 |
| 30° 19′ N | 17° 01′ W | 4,163 |
| 30° 16′ N | 17° 05′ W | 4,172 |
| 30° 07′ N | 17° 21′ W | 4,236 |
| 30° 05′ N | 17° 26′ W | 4,260 |
| 30° 01′ N | 17° 34′ W | 4,317 |
| 29° 55′ N | 17° 33′ W | 4,349 |
| 29° 48′ N | 17° 37′ W | 4,321 |
| 29° 49′ N | 17° 35′ W | 4,324 |
| 29° 51′ N | 17° 34′ W | 4,315 |
| 29° 53′ N | 17° 32′ W | 4,305 |
| 29° 54′ N | 17° 30′ W | 4,296 |
| 29° 56′ N | 17° 29′ W | 4,286 |
| 29° 57′ N | 17° 28′ W | 4,277 |
| 29° 58′ N | 17° 26′ W | 4,277 |
| 30° 00′ N | 17° 25′ W | 4,277 |
| 29° 43′ N | 17° 31′ W | 4,274 |
| 29° 39′ N | 17° 33′ W | 4,236 |
| 29° 27′ N | 17° 40′ W | 4,149 |
| 29° 20′ N | 17° 44′ W | 3,999 |
| 29° 12′ N | 17° 48′ W | 3,767 |
| 29° 05′ N | 17° 52′ W | 3,213 |
| 28° 59′ N | 18° 01′ W | 2,158 |
| 28° 57′ N | 18° 03′ W | **1,465** |
| 28° 55′ N | 18° 05′ W | 1,811 |
| 28° 53′ N | 15° 07′ W | **1,465** |
| 28° 49′ N | 18° 11′ W | 2,697 |
| 28° 45′ N | 18° 17′ W | 3,222 |
| 28° 37′ N | 18° 26′ W | 3,767 |
| 28° 30′ N | 18° 33′ W | 4,129 |
| 28° 23′ N | 18° 40′ W | 4,167 |
| 28° 15′ N | 18° 50′ W | 4,167 |
| 27° 55′ N | 19° 12′ W | 4,228 |
| 27° 51′ N | 19° 17′ W | 4,259 |
| 27° 44′ N | 19° 25′ W | 4,343 |
| 27° 39′ N | 19° 30′ W | 4,343 |
| 27° 35′ N | 19° 35′ W | 4,349 |
| 27° 33′ N | 19° 36′ W | 4,352 |
| 27° 23′ N | 19° 39′ W | 4,349 |
| 27° 33′ N | 19° 39′ W | 4,352 |
| 27° 27′ N | 19° 43′ W | 4,371 |
| 27° 25′ N | 19° 45′ W | 4,352 |
| 27° 24′ N | 19° 46′ W | 4,362 |
| 27° 23′ N | 19° 47′ W | 4,347 |
| 26° 45′ N | 20° 22′ W | 4,478 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 26° 37′ N | 20° 30′ W | 4,496 |
| 26° 31′ N | 20° 35′ W | 4,496 |
| 26° 28′ N | 20° 38′ W | 4,524 |
| 25° 46′ N | 21° 16′ W | 4,657 |
| 25° 39′ N | 21° 23′ W | 4,638 |
| 25° 34′ N | 21° 27′ W | 4,637 |
| 25° 29′ N | 21° 32′ W | 4,646 |
| 25° 25′ N | 21° 41′ W | 4,685 |
| 25° 19′ N | 21° 46′ W | 4,695 |
| 25° 15′ N | 21° 49′ W | 4,708 |
| 24° 05′ N | 22° 34′ W | 4,849 |
| 23° 57′ N | 22° 38′ W | 4,825 |
| 23° 50′ N | 22° 43′ W | 4,825 |
| 23° 43′ N | 22° 47′ W | 4,834 |
| 23° 34′ N | 22° 53′ W | 4,863 |
| 23° 25′ N | 22° 58′ W | 4,868 |
| 23° 21′ N | 23° 00′ W | 4,865 |
| 23° 13′ N | 23° 05′ W | 4,875 |
| 22° 35′ N | 23° 26′ W | **4,952** |
| 22° 31′ N | 23° 28′ W | 4,936 |
| 22° 31′ N | 23° 28′ W | 4,902 |
| 22° 31′ N | 23° 26′ W | 4,889 |
| 22° 33′ N | 23° 24′ W | 4,880 |
| 22° 33′ N | 23° 23′ W | 4,870 |
| 22° 34′ N | 23° 21′ W | 4,870 |
| 22° 35′ N | 23° 20′ W | 4,861 |
| 22° 36′ N | 23° 18′ W | 4,870 |
| 22° 37′ N | 23° 15′ W | 4,861 |
| 22° 40′ N | 23° 07′ W | 4,870 |
| 22° 39′ N | 23° 04′ W | 4,861 |
| 21° 35′ N | 21° 55′ W | 4,504 |
| 21° 28′ N | 21° 51′ W | 4,419 |
| 21° 21′ N | 21° 45′ W | 4,384 |
| 21° 18′ N | 21° 41′ W | 4,374 |
| 21° 14′ N | 21° 36′ W | 4,319 |
| 20° 25′ N | 20° 14′ W | 3,805 |
| 19° 02′ N | 18° 13′ W | 2,796 |
| 18° 43′ N | 18° 46′ W | 2,971 |
| 17° 57′ N | 21° 01′ W | 3,101 |
| 17° 55′ N | 21° 12′ W | 3,158 |
| 17° 54′ N | 21° 15′ W | 3,164 |
| 17° 51′ N | 21° 23′ W | 3,210 |
| 17° 48′ N | 21° 32′ W | 3,256 |
| 17° 44′ N | 21° 43′ W | 3,320 |
| 17° 42′ N | 21° 51′ W | 3,339 |
| 17° 39′ N | 22° 00′ W | 3,339 |
| 17° 36′ N | 22° 09′ W | 3,358 |
| 17° 33′ N | 22° 17′ W | 3,367 |
| 17° 30′ N | 22° 26′ W | 3,348 |
| 17° 26′ N | 22° 36′ W | 3,348 |
| 17° 13′ N | 23° 16′ W | 3,394 |
| 17° 11′ N | 23° 22′ W | 3,404 |
| 17° 11′ N | 23° 23′ W | 3,340 |
| 17° 10′ N | 23° 24′ W | 3,376 |
| 17° 07′ N | 23° 33′ W | 3,376 |
| 17° 02′ N | 23° 48′ W | 3,427 |
| 16° 59′ N | 23° 57′ W | 3,436 |
| 16° 59′ N | 23° 58′ W | 3,446 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 16° 57′ N | 24° 10′ W | 3,266 |
| 16° 57′ N | 24° 14′ W | 3,189 |
| 16° 57′ N | 24° 26′ W | 2,952 |
| 16° 58′ N | 24° 35′ W | 2,457 |
| 16° 59′ N | 24° 43′ W | 1,911 |
| 17° 00′ N | 24° 50′ W | 111 |
| 17° 00′ N | 24° 52′ W | 56 |

PROFILE 19.

| | | |
|---|---|---|
| 15° 56′ N | 25° 25′ W | 4,277 |
| 15° 52′ N | 25° 26′ W | 4,258 |
| 14° 17′ N | 25° 43′ W | 4,550 |
| 14° 09′ N | 25° 44′ W | 4,597 |
| 14° 03′ N | 25° 45′ W | 4,523 |
| 13° 55′ N | 25° 46′ W | 4,645 |
| 13° 51′ N | 25° 48′ W | 4,701 |
| 13° 44′ N | 25° 50′ W | 4,752 |
| 13° 37′ N | 25° 51′ W | 4,799 |
| 13° 36′ N | 25° 51′ W | 4,827 |
| 13° 27′ N | 25° 54′ W | 4,856 |
| 13° 21′ N | 25° 55′ W | 4,880 |
| 13° 13′ N | 25° 56′ W | 4,937 |
| 13° 05′ N | 25° 58′ W | 5,015 |
| 12° 56′ N | 26° 00′ W | 5,055 |
| 12° 07′ N | 26° 11′ W | 5,321 |
| 11° 58′ N | 26° 14′ W | *4,928* |
| 11° 50′ N | 26° 15′ W | 5,419 |
| 11° 48′ N | 26° 16′ W | 5,381 |
| 11° 44′ N | 26° 17′ W | 5,448 |
| 11° 36′ N | 26° 19′ W | 5,409 |
| 11° 26′ N | 26° 21′ W | 5,390 |
| 11° 18′ N | 26° 23′ W | 5,296 |
| 11° 12′ N | 26° 24′ W | 5,644 |
| 11° 11′ N | 26° 24′ W | 5,664 |
| 11° 06′ N | 26° 25′ W | 5,291 |
| 11° 05′ N | 26° 25′ W | 5,371 |
| 11° 04′ N | 26° 25′ W | 5,096 |
| 11° 00′ N | 26° 25′ W | 5,673 |
| 10° 53′ N | 26° 26′ W | 5,475 |
| 10° 46′ N | 26° 27′ W | 5,730 |
| 10° 42′ N | 26° 27′ W | 5,655 |
| 10° 37′ N | 26° 28′ W | 5,125 |
| 10° 32′ N | 26° 29′ W | 5,612 |
| 10° 27′ N | 26° 29′ W | 5,050 |
| 10° 24′ N | 26° 30′ W | 5,567 |
| 10° 19′ N | 26° 30′ W | 5,495 |
| 10° 16′ N | 26° 30′ W | 5,362 |
| 10° 14′ N | 26° 31′ W | 5,495 |
| 10° 12′ N | 26° 31′ W | 5,362 |
| 10° 11′ N | 26° 31′ W | 5,404 |
| 10° 10′ N | 26° 33′ W | 5,543 |
| 10° 06′ N | 26° 34′ W | 5,362 |
| 10° 04′ N | 26° 33′ W | 5,437 |
| 10° 00′ N | 26° 30′ W | 5,172 |
| 9° 58′ N | 26° 28′ W | 5,078 |
| 9° 53′ N | 26° 30′ W | 5,521 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 9° 50′ N | 26° 29′ W | 5,584 |
| 9° 47′ N | 26° 25′ W | 5,580 |
| 9° 40′ N | 26° 19′ W | *5,292* |
| 7° 54′ N | 24° 43′ W | 4,959 |
| 7° 53′ N | 24° 41′ W | 4,940 |
| 6° 51′ N | 23° 27′ W | 4,114 |
| 7° 00′ N | 22° 31′ W | 3,759 |
| 6° 55′ N | 22° 27′ W | 1,455 |
| 6° 54′ N | 22° 26′ W | **1,319** |
| 6° 47′ N | 22° 23′ W | 2,872 |
| 6° 43′ N | 22° 20′ W | 3,086 |
| 6° 40′ N | 22° 18′ W | 2,762 |
| 6° 36′ N | 22° 15′ W | 3,620 |
| 5° 49′ N | 21° 45′ W | 3,663 |
| 5° 46′ N | 21° 45′ W | 3,579 |
| 5° 44′ N | 21° 42′ W | 3,570 |
| 5° 38′ N | 21° 42′ W | 3,441 |
| 5° 34′ N | 21° 41′ W | 3,352 |
| 5° 28′ N | 21° 40′ W | 3,201 |
| 5° 24′ N | 21° 39′ W | 3,025 |
| 5° 18′ N | 21° 38′ W | 2,985 |
| 5° 13′ N | 21° 37′ W | 2,902 |
| 5° 05′ N | 21° 35′ W | 2,683 |
| 4° 46′ N | 21° 30′ W | 2,911 |
| 4° 42′ N | 21° 30′ W | *3,059* |
| 4° 38′ N | 21° 29′ W | 2,839 |
| 4° 35′ N | 21° 28′ W | 2,189 |
| 4° 30′ N | 21° 27′ W | 2,957 |
| 4° 25′ N | 21° 26′ W | 3,345 |
| 4° 20′ N | 21° 25′ W | 3,090 |
| 4° 16′ N | 21° 02′ W | 3,623 |
| 4° 12′ N | 21° 00′ W | 2,906 |
| 4° 10′ N | 20° 58′ W | 3,440 |
| 4° 06′ N | 20° 56′ W | 2,961 |
| 3° 50′ N | 20° 48′ W | 4,262 |
| 3° 47′ N | 20° 46′ W | 3,550 |
| 3° 42′ N | 20° 43′ W | 4,152 |
| 3° 39′ N | 20° 42′ W | 4,317 |
| 3° 38′ N | 20° 41′ W | 4,328 |
| 3° 35′ N | 20° 39′ W | 4,366 |
| 3° 19′ N | 20° 30′ W | 4,570 |
| 3° 18′ N | 20° 30′ W | 4,554 |
| 3° 16′ N | 20° 29′ W | 4,534 |
| 3° 15′ N | 20° 29′ W | 4,488 |
| 3° 14′ N | 20° 28′ W | 4,608 |
| 3° 09′ N | 20° 26′ W | 4,422 |
| 3° 08′ N | 20° 26′ W | 4,570 |
| 3° 06′ N | 20° 25′ W | 4,591 |
| 3° 02′ N | 20° 24′ W | 4,591 |
| 2° 58′ N | 20° 23′ W | 4,591 |
| 2° 48′ N | 20° 19′ W | 4,647 |
| 2° 44′ N | 20° 18′ W | 4,628 |
| 2° 40′ N | 20° 17′ W | 4,647 |
| 2° 35′ N | 20° 15′ W | 4,642 |
| 2° 10′ N | 20° 07′ W | 4,799 |
| 2° 08′ N | 20° 07′ W | 4,950 |
| 2° 06′ N | 20° 06′ W | 5,149 |
| 2° 03′ N | 20° 02′ W | 5,055 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 2° 00′ N | 20° 00′ W | 5,148 |
| 1° 57′ N | 19° 56′ W | 5,185 |
| 1° 54′ N | 19° 53′ W | 5,175 |
| 1° 50′ N | 19° 48′ W | 5,175 |
| 1° 27′ N | 19° 23′ W | 4,454 |
| 1° 25′ N | 19° 22′ W | 4,249 |
| 1° 23′ N | 19° 19′ W | 5,025 |
| 1° 19′ N | 19° 15′ W | 4,885 |
| 1° 15′ N | 19° 12′ W | 4,035 |
| 1° 11′ N | 19° 07′ W | 4,754 |
| 1° 09′ N | 19° 05′ W | 4,678 |
| 1° 06′ N | 19° 03′ W | 4,903 |
| 1° 02′ N | 18° 58′ W | 4,464 |
| 0° 49′ N | 18° 45′ W | 4,950 |
| 0° 46′ N | 18° 42′ W | *5,034* |
| 0° 44′ N | 18° 40′ W | *5,034* |
| 0° 41′ N | 18° 38′ W | *5,119* |
| 0° 31′ N | 18° 28′ W | *5,025* |
| 0° 26′ N | 18° 23′ W | 4,184 |
| 0° 24′ N | 18° 21′ W | 4,912 |
| 0° 20′ N | 18° 18′ W | 4,323 |
| 0° 19′ N | 18° 16′ W | 4,604 |
| 0° 13′ N | 18° 11′ W | 4,547 |
| 0° 08′ N | 18° 12′ W | 3,654 |
| 0° 01′ N | 18° 12′ W | 2,887 |
| 0° 02′ S | 18° 12′ W | 4,035 |
| 0° 08′ S | 18° 12′ W | 2,584 |
| 0° 11′ S | 18° 12′ W | 3,275 |
| 0° 12′ S | 18° 10′ W | 3,210 |
| 0° 12′ S | 18° 03′ W | 4,063 |
| 0° 18′ S | 18° 00′ W | **6,092** |
| 0° 19′ S | 18° 07′ W | 4,426 |
| 0° 23′ S | 18° 08′ W | 5,637 |
| 0° 23′ S | 18° 10′ W | 5,382 |
| 0° 26′ S | 18° 09′ W | 6,048 |

ROMANCHE-DEEP

| | | |
|---|---|---|
| 0° 04′ N | 18° 09′ W | 6,124 |
| 0° 04′ N | 18° 10′ W | 6,066 |
| 0° 04′ N | 18° 11′ W | 5,763 |
| 0° 04′ N | 18° 12′ W | 5,594 |
| 0° 04′ N | 18° 13′ W | 5,650 |
| 0° 04′ N | 18° 14′ W | 5,236 |
| 0° 04′ N | 18° 15′ W | 4,935 |
| 0° 04′ N | 18° 16′ W | 4,404 |
| 0° 00′ N | 18° 17′ W | 5,632 |
| 0° 00′ N | 18° 18′ W | 5,376 |
| 0° 00′ N | 18° 19′ W | 5,122 |
| 0° 00′ N | 18° 18′ W | 5,357 |
| 0° 00′ N | 18° 16′ W | 5,404 |
| 0° 00′ N | 18° 15′ W | 5,461 |
| 0° 00′ N | 18° 14′ W | 5,357 |
| 0° 01′ S | 18° 13′ W | 5,433 |
| 0° 02′ S | 18° 13′ W | 5,915 |
| 0° 03′ S | 18° 12′ W | 6,009 |
| 0° 06′ S | 18° 14′ W | 6,668 |
| 0° 09′ S | 18° 14′ W | 6,831 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 0° 11′ S | 18° 14′ W | 7,280 |
| 0° 13′ S | 18° 14′ W | 7,088 |
| 0° 11′ S | 18° 16′ W | 7,260 |
| 0° 10′ S | 18° 14′ W | 7,235 |
| 0° 09′ S | 18° 14′ W | 7,318 |
| 0° 08′ S | 18° 13′ W | 6,986 |
| 0° 07′ S | 18° 13′ W | 6,919 |
| 0° 08′ S | 18° 12′ W | 7,315 |
| 0° 09′ S | 18° 11′ W | 7,139 |
| 0° 10′ S | 18° 10′ W | 6,989 |
| 0° 11′ S | 18° 08′ W | 7,241 |
| 0° 12′ S | 18° 08′ W | 6,749 |
| 0° 13′ S | 18° 07′ W | 6,518 |
| 0° 18′ S | 18° 01′ W | 2,798 |
| 0° 16′ S | 18° 03′ W | **2,618** |
| 0° 12′ S | 18° 04′ W | 5,859 |
| 0° 10′ S | 18° 05′ W | 7,026 |
| 0° 06′ S | 18° 08′ W | 6,807 |
| 0° 05′ S | 18° 09′ W | 6,521 |
| 0° 03′ S | 18° 09′ W | 6,387 |
| 0° 01′ S | 18° 11′ W | 5,595 |
| 0° 01′ S | 18° 11′ W | 5,595 |
| 0° 02′ S | 18° 10′ W | 5,718 |
| 0° 02′ S | 18° 10′ W | 6,199 |
| 0° 02′ S | 18° 10′ W | 6,247 |
| 0° 03′ S | 18° 09′ W | 6,237 |
| 0° 03′ S | 18° 09′ W | 6,369 |
| 0° 03′ S | 18° 09′ W | 6,464 |
| 0° 04′ S | 18° 09′ W | 6,502 |
| 0° 04′ S | 18° 09′ W | 6,560 |
| 0° 04′ S | 18° 09′ W | 6,626 |
| 0° 07′ S | 18° 10′ W | 7,162 |
| 0° 07′ S | 18° 10′ W | 7,264 |
| 0° 08′ S | 18° 12′ W | 7,314 |
| 0° 09′ S | 18° 12′ W | 7,275 |
| 0° 09′ S | 18° 13′ W | 6,875 |
| 0° 08′ S | 18° 15′ W | 7,186 |
| 0° 12′ S | 18° 21′ W | 7,431 |
| 0° 12′ S | 18° 22′ W | 7,431 |
| 0° 13′ S | 18° 22′ W | 7,448 |
| 0° 15′ S | 18° 25′ W | 7,718 |
| 0° 16′ S | 18° 27′ W | 7,726 |
| 0° 18′ S | 18° 30′ W | 6,853 |
| 0° 13′ S | 18° 26′ W | **7,728** |
| 0° 13′ S | 18° 26′ W | 7,699 |
| 0° 13′ S | 18° 25′ W | 7,558 |
| 0° 13′ S | 18° 25′ W | 7,538 |
| 0° 14′ S | 18° 26′ W | 7,717 |
| 0° 15′ S | 18° 28′ W | 7,726 |
| 0° 17′ S | 18° 30′ W | 6,830 |
| 0° 17′ S | 18° 31′ W | 6,841 |

PROFILE 20.

| | | |
|---|---|---|
| 0° 58′ N | 18° 42′ W | *5,315* |
| 0° 58′ N | 18° 42′ W | *5,337* |
| 0° 58′ N | 18° 40′ W | *5,302* |
| 1° 00′ N | 18° 38′ W | **5,466** |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 1° 00′ N | 18° 40′ W | *5,400* |
| 1° 00′ N | 18° 42′ W | 4,912 |
| 1° 02′ N | 18° 42′ W | *5,302* |
| 1° 02′ N | 18° 43′ W | *5,287* |
| 1° 11′ N | 19° 47′ W | 4,488 |
| 1° 11′ N | 19° 49′ W | 4,417 |
| 1° 12′ N | 19° 50′ W | 4,338 |
| 1° 11′ N | 19° 51′ W | 4,273 |
| 1° 10′ N | 19° 54′ W | 4,030 |
| 1° 10′ N | 20° 00′ W | 4,310 |
| 1° 10′ N | 20° 01′ W | 4,086 |
| 1° 09′ N | 20° 05′ W | 4,642 |
| 1° 08′ N | 20° 22′ W | 4,892 |
| 1° 07′ N | 20° 26′ W | *4,976* |
| 0° 48′ N | 22° 25′ W | 4,079 |
| 0° 46′ N | 22° 31′ W | 3,495 |
| 0° 45′ N | 22° 33′ W | 3,904 |
| 0° 45′ N | 22° 38′ W | 3,423 |
| 0° 45′ N | 22° 39′ W | 4,124 |
| 0° 45′ N | 28° 43′ W | 3,830 |
| 0° 45′ N | 28° 44′ W | 3,830 |
| 0° 45′ N | 28° 45′ W | 3,826 |
| 0° 45′ N | 28° 45′ W | 3,588 |
| 0° 44′ N | 22° 46′ W | 4,330 |
| 0° 43′ N | 22° 49′ W | 3,819 |
| 0° 42′ N | 23° 03′ W | 4,097 |
| 0° 42′ N | 23° 04′ W | 4,079 |
| 0° 42′ N | 23° 07′ W | 4,074 |
| 0° 41′ N | 23° 11′ W | 4,241 |
| 0° 40′ N | 23° 20′ W | 3,441 |
| 0° 40′ N | 23° 26′ W | 4,321 |
| 0° 40′ N | 23° 28′ W | 3,774 |
| 0° 40′ N | 23° 29′ W | 3,699 |
| 0° 40′ N | 23° 31′ W | 3,839 |
| 0° 39′ N | 23° 42′ W | 2,833 |
| 0° 39′ N | 23° 47′ W | 4,088 |
| 0° 38′ N | 23° 54′ W | 3,387 |
| 0° 37′ N | 23° 59′ W | 4,218 |
| 0° 37′ N | 24° 00′ W | 3,755 |
| 0° 32′ N | 25° 06′ W | 3,866 |
| 0° 32′ N | 25° 08′ W | 2,944 |
| 0° 31′ N | 25° 11′ W | 3,792 |
| 0° 31′ N | 25° 14′ W | 2,888 |
| 0° 31′ N | 25° 24′ W | 4,424 |
| 0° 31′ N | 25° 29′ W | 4,200 |
| 0° 30′ N | 25° 31′ W | 3,124 |
| 0° 30′ N | 25° 32′ W | 3,272 |
| 0° 30′ N | 25° 33′ W | 1,846 |
| 0° 30′ N | 25° 36′ W | 2,574 |
| 0° 29′ N | 25° 39′ W | 3,738 |
| 0° 29′ N | 25° 46′ W | 3,420 |
| 0° 29′ N | 25° 48′ W | 4,084 |
| 0° 29′ N | 25° 50′ W | 3,439 |
| 0° 28′ N | 25° 56′ W | 3,844 |
| 0° 27′ N | 26° 00′ W | 3,528 |
| 0° 27′ N | 26° 04′ W | *4,065* |
| 0° 26′ N | 26° 12′ W | *4,046* |
| 0° 24′ N | 26° 23′ W | *4,065* |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 0° 22′ N | 26° 34′ W | *4,074* |
| 0° 20′ N | 26° 42′ W | *4,084* |
| 0° 19′ N | 26° 48′ W | *4,084* |
| 0° 19′ N | 26° 50′ W | 3,018 |
| 0° 19′ N | 26° 54′ W | *4,056* |
| 0° 19′ N | 26° 56′ W | 3,174 |
| 0° 20′ N | 27° 00′ W | *4,056* |
| 0° 21′ N | 27° 09′ W | *4,025* |
| 0° 21′ N | 27° 10′ W | 3,710 |
| 0° 22′ N | 27° 18′ W | 2,567 |
| 0° 22′ N | 27° 21′ W | 3,046 |
| 0° 23′ N | 27° 25′ W | 2,622 |
| 0° 24′ N | 27° 33′ W | 3,543 |
| 0° 24′ N | 27° 34′ W | 3,319 |
| 0° 27′ N | 27° 44′ W | 3,693 |
| 0° 27′ N | 27° 45′ W | 3,709 |
| 0° 27′ N | 27° 46′ W | 3,721 |
| 0° 28′ N | 27° 53′ W | 3,712 |
| 0° 29′ N | 28° 01′ W | 3,684 |
| 0° 29′ N | 28° 11′ W | 3,555 |
| 0° 31′ N | 28° 31′ W | 3,573 |
| 0° 32′ N | 28° 39′ W | 3,753 |
| 0° 33′ N | 28° 48′ W | 3,772 |
| 0° 35′ N | 28° 57′ W | 3,577 |
| 0° 37′ N | 29° 03′ W | 3,744 |
| 0° 40′ N | 29° 07′ W | 2,985 |
| 0° 44′ N | 29° 09′ W | 3,356 |
| 0° 50′ N | 29° 12′ W | **186** |
| 0° 51′ N | 29° 13′ W | 1,376 |
| 0° 57′ N | 29° 25′ W | 1,696 |
| 0° 57′ N | 29° 33′ W | 3,448 |
| 0° 57′ N | 29° 39′ W | 3,012 |
| 0° 56′ N | 29° 41′ W | 3,835 |
| 0° 56′ N | 29° 43′ W | 3,644 |
| 0° 56′ N | 29° 44′ W | 3,904 |
| 0° 56′ N | 29° 46′ W | 2,640 |
| 0° 56′ N | 29° 47′ W | 2,383 |
| 0° 56′ N | 29° 48′ W | 2,255 |
| 0° 56′ N | 29° 49′ W | 2,567 |
| 0° 55′ N | 29° 50′ W | 2,182 |
| 0° 55′ N | 29° 54′ W | 2,933 |
| 0° 55′ N | 29° 55′ W | 2,840 |
| 0° 53′ N | 30° 03′ W | *2,782* |
| 0° 52′ N | 30° 10′ W | *2,198* |
| 0° 51′ N | 30° 14′ W | *1,615* |
| 0° 50′ N | 30° 18′ W | *2,948* |
| 0° 49′ N | 30° 20′ W | *2,600* |
| 0° 48′ N | 30° 27′ W | 3,253 |
| 0° 47′ N | 30° 32′ W | 3,502 |
| 0° 46′ N | 30° 38′ W | *2,481* |
| 0° 45′ N | 30° 43′ W | *2,911* |
| 0° 44′ N | 30° 46′ W | *2,711* |
| 0° 44′ N | 30° 47′ W | 3,170 |
| 0° 43′ N | 30° 55′ W | 3,742 |
| 0° 47′ N | 31° 06′ W | *3,308* |
| 0° 46′ N | 31° 13′ W | *3,687* |
| 0° 45′ N | 31° 22′ W | 3,430 |
| 0° 45′ N | 31° 25′ W | 3,209 |
| 0° 45′ N | 31° 27′ W | 3,207 |
| 0° 44′ N | 31° 34′ W | 3,455 |
| 0° 42′ N | 31° 43′ W | *3,418* |
| 0° 40′ N | 31° 50′ W | *3,492* |
| 0° 39′ N | 31° 58′ W | *3,456* |
| 0° 38′ N | 32° 01′ W | 3,096 |
| 0° 38′ N | 32° 02′ W | 3,354 |
| 0° 37′ N | 32° 03′ W | 2,875 |
| 0° 37′ N | 32° 04′ W | 3,096 |
| 0° 37′ N | 32° 05′ W | 2,838 |
| 0° 36′ N | 32° 07′ W | 3,940 |
| 0° 36′ N | 32° 08′ W | 3,979 |
| 0° 36′ N | 32° 09′ W | 3,994 |
| 0° 35′ N | 32° 15′ W | 4,441 |
| 0° 33′ N | 32° 25′ W | 4,562 |
| 0° 31′ N | 32° 33′ W | 4,562 |
| 0° 29′ N | 32° 40′ W | 4,559 |
| 0° 27′ N | 32° 47′ W | 4,513 |
| 0° 25′ N | 32° 57′ W | 4,371 |
| 0° 23′ N | 33° 07′ W | 4,389 |
| 0° 21′ N | 33° 18′ W | 4,571 |
| 0° 20′ N | 33° 23′ W | 4,580 |
| 0° 19′ N | 33° 28′ W | 4,580 |
| 0° 17′ N | 33° 40′ W | 4,562 |
| 0° 11′ N | 34° 12′ W | 4,563 |
| 0° 05′ N | 34° 32′ W | 4,563 |
| 0° 04′ N | 34° 36′ W | 4,572 |
| 0° 04′ N | 34° 40′ W | 4,572 |
| 0° 06′ N | 34° 50′ W | 4,554 |
| 0° 07′ N | 34° 58′ W | 4,545 |
| 0° 09′ N | 35° 07′ W | 4,541 |
| 0° 11′ N | 35° 19′ W | 4,541 |
| 0° 12′ N | 35° 24′ W | 4,541 |
| 0° 13′ N | 35° 31′ W | 4,551 |
| 0° 14′ N | 35° 39′ W | 4,538 |
| 0° 15′ N | 35° 44′ W | 4,547 |
| 0° 23′ N | 36° 31′ W | 4,573 |
| 0° 25′ N | 36° 37′ W | 4,513 |
| 0° 27′ N | 36° 42′ W | 4,275 |
| 0° 31′ N | 36° 51′ W | 4,527 |
| 0° 34′ N | 36° 58′ W | 4,515 |
| 0° 38′ N | 37° 07′ W | 4,515 |

PROFILE 21.

| | | |
|---|---|---|
| 0° 41′ N | 37° 12′ W | 4,555 |
| 0° 46′ N | 37° 17′ W | 4,527 |
| 0° 51′ N | 37° 24′ W | 4,518 |
| 0° 54′ N | 37° 29′ W | *3,771* |
| 0° 58′ N | 37° 34′ W | 4,545 |
| 1° 04′ N | 37° 42′ W | *3,641* |
| 1° 09′ N | 37° 48′ W | *3,976* |
| 1° 13′ N | 37° 53′ W | 4,197 |
| 1° 17′ N | 37° 58′ W | 4,188 |
| 1° 22′ N | 38° 04′ W | 4,122 |
| 1° 25′ N | 38° 08′ W | 4,028 |
| 1° 33′ N | 38° 18′ W | 4,028 |
| 1° 38′ N | 38° 24′ W | 4,308 |
| 1° 42′ N | 38° 30′ W | 4,308 |
| 1° 50′ N | 38° 40′ W | 4,345 |
| 1° 52′ N | 38° 43′ W | 4,289 |
| 1° 54′ N | 38° 46′ W | 4,528 |
| 1° 59′ N | 38° 52′ W | 4,509 |
| 2° 03′ N | 38° 56′ W | 4,470 |
| 2° 10′ N | 39° 06′ W | 4,488 |
| 2° 10′ N | 39° 06′ W | 4,488 |
| 2° 16′ N | 39° 12′ W | 4,470 |
| 2° 18′ N | 39° 14′ W | 4,485 |
| 2° 20′ N | 39° 17′ W | 4,469 |
| 2° 23′ N | 39° 20′ W | 4,463 |
| 2° 29′ N | 39° 28′ W | 4,470 |
| 2° 30′ N | 39° 29′ W | 4,501 |
| 2° 37′ N | 39° 28′ W | 4,463 |
| 2° 42′ N | 39° 35′ W | 4,475 |
| 2° 47′ N | 39° 41′ W | 4,448 |
| 2° 48′ N | 39° 42′ W | 4,495 |
| 2° 54′ N | 39° 50′ W | 4,467 |
| 2° 59′ N | 39° 57′ W | 4,299 |
| 3° 06′ N | 40° 05′ W | 4,429 |
| 3° 12′ N | 40° 14′ W | 4,308 |
| 3° 17′ N | 40° 20′ W | 4,224 |
| 3° 22′ N | 40° 26′ W | 4,253 |
| 3° 26′ N | 40° 32′ W | 4,224 |
| 3° 32′ N | 40° 39′ W | *3,862* |
| 3° 38′ N | 40° 47′ W | 4,012 |
| 3° 42′ N | 40° 52′ W | *3,899* |
| 3° 48′ N | 41° 00′ W | *3,962* |
| 3° 58′ N | 41° 12′ W | *3,886* |
| 4° 05′ N | 41° 20′ W | 3,478 |
| 4° 09′ N | 41° 26′ W | 3,608 |
| 4° 11′ N | 41° 28′ W | **3,469** |
| 4° 13′ N | 41° 30′ W | 3,664 |
| 4° 14′ N | 41° 32′ W | 3,608 |
| 4° 20′ N | 41° 39′ W | 4,088 |
| 4° 23′ N | 41° 44′ W | 4,283 |
| 4° 26′ N | 41° 46′ W | 4,398 |
| 4° 31′ N | 41° 52′ W | 4,043 |
| 4° 34′ N | 41° 54′ W | 3,967 |
| 4° 41′ N | 41° 59′ W | 4,353 |
| 4° 48′ N | 42° 05′ W | 4,459 |
| 4° 55′ N | 42° 11′ W | 4,639 |
| 5° 02′ N | 42° 17′ W | 4,682 |
| 5° 08′ N | 42° 22′ W | 4,702 |
| 5° 12′ N | 42° 26′ W | 4,636 |
| 5° 17′ N | 42° 30′ W | 4,711 |
| 5° 23′ N | 42° 35′ W | 4,711 |
| 5° 30′ N | 42° 40′ W | 4,729 |
| 5° 36′ N | 42° 45′ W | 4,720 |
| 5° 40′ N | 42° 49′ W | 4,659 |
| 5° 46′ N | 42° 54′ W | 4,707 |
| 5° 58′ N | 43° 04′ W | 4,650 |
| 6° 04′ N | 43° 09′ W | 4,564 |
| 6° 09′ N | 43° 13′ W | 4,502 |
| 6° 16′ N | 43° 19′ W | 4,524 |
| 6° 17′ N | 43° 20′ W | 4,543 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 6° 22′ N | 43° 25′ W | 4,518 |
| 6° 25′ N | 43° 32′ W | 4,639 |
| 6° 30′ N | 43° 37′ W | 4,636 |
| 6° 36′ N | 43° 46′ W | 4,607 |
| 6° 38′ N | 43° 48′ W | 4,463 |
| 6° 42′ N | 43° 54′ W | 4,654 |
| 6° 46′ N | 44° 00′ W | 4,664 |
| 6° 50′ N | 44° 06′ W | 4,636 |
| 6° 55′ N | 44° 13′ W | 4,607 |
| 7° 05′ N | 44° 27′ W | 4,579 |
| 7° 10′ N | 44° 34′ W | 4,532 |
| 7° 14′ N | 44° 39′ W | 4,510 |
| 7° 28′ N | 44° 59′ W | 4,545 |
| 7° 29′ N | 45° 00′ W | 4,456 |
| 7° 30′ N | 45° 01′ W | 4,441 |
| 7° 32′ N | 45° 06′ W | 4,441 |
| 7° 37′ N | 45° 16′ W | 4,445 |
| 7° 42′ N | 45° 20′ W | 4,416 |
| 7° 45′ N | 45° 30′ W | 4,462 |
| 7° 47′ N | 45° 36′ W | 4,462 |
| 7° 51′ N | 45° 43′ W | 4,473 |
| 7° 54′ N | 45° 48′ W | 4,473 |
| 7° 56′ N | 45° 52′ W | 4,491 |
| 8° 00′ N | 46° 02′ W | 4,547 |
| 8° 05′ N | 46° 10′ W | 4,528 |
| 8° 09′ N | 46° 18′ W | 4,519 |
| 8° 12′ N | 46° 23′ W | 4,516 |
| 8° 15′ N | 46° 29′ W | 4,535 |
| 8° 17′ N | 46° 32′ W | 4,560 |
| 8° 22′ N | 46° 38′ W | 4,560 |
| 8° 28′ N | 46° 44′ W | 4,570 |
| 8° 34′ N | 46° 54′ W | 4,588 |
| 8° 40′ N | 47° 03′ W | 4,607 |
| 8° 47′ N | 47° 12′ W | 4,626 |
| 8° 54′ N | 47° 21′ W | 4,692 |
| 8° 56′ N | 47° 23′ W | 4,692 |
| 8° 58′ N | 47° 26′ W | 4,711 |
| 9° 03′ N | 47° 32′ W | 4,729 |
| 9° 11′ N | 47° 43′ W | 4,748 |
| 9° 17′ N | 47° 50′ W | 4,739 |
| 9° 21′ N | 47° 56′ W | 4,748 |
| 9° 33′ N | 48° 12′ W | 4,805 |
| 9° 40′ N | 48° 21′ W | 4,805 |
| 9° 45′ N | 48° 28′ W | 4,814 |
| 9° 52′ N | 48° 37′ W | 4,827 |
| 10° 00′ N | 48° 47′ W | 4,847 |
| 10° 06′ N | 48° 57′ W | 4,894 |
| 10° 13′ N | 49° 06′ W | 4,894 |
| 10° 20′ N | 49° 16′ W | 4,903 |
| 10° 25′ N | 49° 24′ W | 4,914 |
| 10° 32′ N | 49° 33′ W | 4,923 |
| 10° 45′ N | 49° 53′ W | 4,932 |
| 10° 52′ N | 50° 02′ W | 4,951 |
| 10° 55′ N | 50° 10′ W | *4,960* |
| 11° 02′ N | 50° 18′ W | *4,960* |
| 11° 06′ N | 50° 26′ W | *4,970* |
| 11° 15′ N | 50° 39′ W | 5,018 |
| 11° 21′ N | 50° 48′ W | *4,981* |
| 11° 26′ N | 50° 55′ W | 5,001 |
| 11° 32′ N | 51° 04′ W | 5,001 |
| 11° 38′ N | 51° 14′ W | *4,995* |
| 11° 40′ N | 51° 16′ W | 4,993 |
| 11° 45′ N | 51° 24′ W | 4,993 |
| 11° 44′ N | 51° 10′ W | 4,988 |
| 11° 45′ N | 51° 11′ W | 5,018 |
| 11° 46′ N | 51° 13′ W | 5,033 |
| 12° 00′ N | 51° 30′ W | *4,611* |
| 12° 03′ N | 51° 35′ W | 5,052 |
| 12° 08′ N | 51° 41′ W | 5,042 |
| 12° 13′ N | 51° 47′ W | 5,036 |
| 12° 17′ N | 51° 51′ W | 5,025 |
| 12° 18′ N | 51° 53′ W | 5,036 |
| 12° 20′ N | 51° 55′ W | 5,045 |
| 12° 20′ N | 51° 56′ W | 5,047 |
| 12° 25′ N | 52° 03′ W | 5,077 |
| 12° 30′ N | 52° 13′ W | 5,035 |
| 12° 36′ N | 52° 23′ W | 5,044 |
| 12° 41′ N | 52° 33′ W | 5,015 |
| 12° 49′ N | 52° 43′ W | 5,077 |
| 12° 50′ N | 52° 46′ W | 4,995 |
| 12° 52′ N | 52° 48′ W | 5,109 |
| 12° 53′ N | 52° 51′ W | 4,975 |
| 12° 54′ N | 52° 53′ W | 5,070 |
| 12° 55′ N | 52° 54′ W | 5,089 |
| 12° 56′ N | 52° 56′ W | 5,004 |
| 12° 58′ N | 53° 00′ W | 5,080 |
| 13° 05′ N | 53° 09′ W | 4,969 |
| 13° 09′ N | 53° 15′ W | 5,025 |
| 13° 13′ N | 53° 21′ W | *4,230* |
| 13° 16′ N | 53° 24′ W | 5,130 |
| 13° 26′ N | 53° 37′ W | 5,263 |
| 13° 31′ N | 53° 45′ W | 5,168 |
| 13° 35′ N | 53° 50′ W | 5,187 |
| 13° 39′ N | 53° 56′ W | 5,311 |
| 13° 43′ N | 54° 03′ W | 5,196 |
| 13° 51′ N | 54° 12′ W | 5,282 |
| 14° 02′ N | 54° 26′ W | 5,353 |
| 14° 08′ N | 54° 34′ W | 5,329 |
| 14° 13′ N | 54° 42′ W | 5,339 |
| 14° 21′ N | 54° 52′ W | 5,444 |
| 14° 24′ N | 54° 55′ W | 5,431 |
| 14° 32′ N | 55° 05′ W | 5,460 |
| 14° 33′ N | 55° 06′ W | 5,460 |
| 14° 38′ N | 55° 13′ W | 5,498 |
| 14° 44′ N | 55° 22′ W | 5,476 |
| 14° 50′ N | 55° 31′ W | *5,466* |
| 14° 54′ N | 55° 37′ W | *5,485* |
| 15° 00′ N | 55° 45′ W | *5,485* |
| 15° 00′ N | 55° 53′ W | *5,520* |
| 15° 11′ N | 56° 02′ W | *5,520* |
| 15° 16′ N | 56° 09′ W | *5,511* |
| 15° 20′ N | 56° 15′ W | *5,472* |
| 15° 28′ N | 56° 28′ W | *5,453* |
| 15° 34′ N | 56° 36′ W | *5,462* |
| 15° 36′ N | 56° 38′ W | *5,443* |
| 15° 44′ N | 56° 50′ W | *5,291* |
| 15° 44′ N | 56° 50′ W | *5,291* |
| 15° 52′ N | 57° 00′ W | 5,291 |
| 15° 54′ N | 57° 03′ W | 5,303 |
| 15° 59′ N | 57° 09′ W | 5,312 |
| 16° 05′ N | 57° 16′ W | 5,312 |
| 16° 09′ N | 57° 21′ W | 5,246 |
| 16° 15′ N | 57° 30′ W | 5,162 |
| 16° 25′ N | 57° 41′ W | 5,049 |
| 16° 30′ N | 57° 48′ W | 4,719 |
| 16° 35′ N | 57° 54′ W | 4,260 |
| 16° 41′ N | 58° 01′ W | *3,908* |
| 16° 44′ N | 58° 05′ W | 5,674 |
| 16° 46′ N | 58° 08′ W | 5,866 |
| 16° 49′ N | 58° 12′ W | 5,712 |
| 16° 49′ N | 58° 13′ W | 5,757 |
| 16° 51′ N | 58° 20′ W | 5,790 |
| 16° 52′ N | 58° 21′ W | 5,847 |
| 16° 55′ N | 58° 23′ W | 5,577 |
| 16° 56′ N | 58° 28′ W | 5,902 |
| 17° 04′ N | 58° 38′ W | 5,814 |
| 17° 09′ N | 58° 44′ W | 5,619 |
| 17° 14′ N | 58° 51′ W | 5,110 |
| 17° 18′ N | 58° 58′ W | 4,904 |
| 17° 20′ N | 59° 00′ W | 4,827 |
| 17° 22′ N | 59° 03′ W | 5,232 |
| 17° 25′ N | 59° 07′ W | 5,072 |
| 17° 29′ N | 59° 13′ W | 5,628 |
| 17° 34′ N | 59° 18′ W | *6,045* |
| 17° 44′ N | 59° 33′ W | *6,206* |
| 17° 47′ N | 59° 37′ W | *6,139* |
| 17° 51′ N | 59° 43′ W | *6,309* |
| 17° 53′ N | 59° 46′ W | *6,309* |
| 17° 55′ N | 59° 48′ W | *6,197* |
| 17° 57′ N | 59° 51′ W | *6,309* |
| 18° 02′ N | 59° 58′ W | *6,387* |
| 18° 09′ N | 60° 07′ W | *6,551* |
| 18° 14′ N | 60° 15′ W | **6,726** |
| 18° 20′ N | 60° 23′ W | *6,677* |
| 18° 24′ N | 60° 29′ W | *6,396* |
| 18° 26′ N | 60° 38′ W | *6,377* |
| 18° 31′ N | 60° 49′ W | 5,933 |
| 18° 36′ N | 61° 03′ W | 6,089 |
| 18° 39′ N | 61° 12′ W | 5,814 |
| 18° 40′ N | 61° 14′ W | 5,883 |
| 18° 43′ N | 61° 23′ W | 5,956 |
| 18° 44′ N | 61° 30′ W | 5,739 |
| 18° 49′ N | 61° 40′ W | 5,956 |
| 18° 51′ N | 61° 48′ W | *6,052* |
| 19° 05′ N | 62° 43′ W | 6,741 |
| 19° 05′ N | 62° 50′ W | 6,236 |
| 19° 05′ N | 62° 55′ W | 5,966 |
| 19° 05′ N | 63° 02′ W | 6,043 |
| 19° 04′ N | 63° 03′ W | 5,908 |
| 18° 58′ N | 63° 06′ W | 5,678 |
| 18° 48′ N | 63° 15′ W | 6,158 |
| 18° 41′ N | 63° 20′ W | 425 |
| 18° 38′ N | 63° 22′ W | 75 |
| 18° 35′ N | 63° 25′ W | 1,121 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 18° 29′ N | 63° 33′ W | 1,311 |
| 18° 25′ N | 63° 40′ W | 793 |
| 18° 23′ N | 63° 46′ W | 1,320 |
| 18° 21′ N | 63° 49′ W | 1,483 |
| 18° 20′ N | 63° 50′ W | 1,301 |
| 18° 19′ N | 63° 53′ W | 1,537 |
| 18° 18′ N | 63° 54′ W | 1,364 |
| 18° 17′ N | 63° 56′ W | 1,692 |
| 18° 16′ N | 63° 57′ W | 1,491 |
| 18° 12′ N | 64° 09′ W | 2,423 |
| 18° 09′ N | 64° 15′ W | 2,911 |
| 18° 05′ N | 64° 23′ W | 1,745 |
| 17° 59′ N | 64° 40′ W | 4,115 |
| 17° 56′ N | 64° 48′ W | 4,515 |
| 17° 54′ N | 64° 55′ W | 4,477 |
| 17° 53′ N | 64° 56′ W | 3,465 |
| 17° 51′ N | 64° 03′ W | 2,123 |
| PROFILE 22. | | |
| 19° 01′ N | 64° 59′ W | 3,546 |
| 19° 02′ N | 64° 59′ W | 3,499 |
| 19° 03′ N | 64° 58′ W | 3,593 |
| 19° 04′ N | 64° 58′ W | 3,748 |
| 19° 05′ N | 64° 57′ W | 3,932 |
| 19° 08′ N | 64° 57′ W | 4,183 |
| 19° 10′ N | 64° 56′ W | 4,788 |
| 19° 15′ N | 64° 55′ W | 5,145 |
| 19° 16′ N | 64° 54′ W | 5,202 |
| 19° 22′ N | 64° 53′ W | 6,124 |
| 19° 33′ N | 64° 47′ W | 7,428 |
| 19° 34′ N | 64° 46′ W | 7,360 |
| 19° 41′ N | 64° 43′ W | 7,408 |
| 19° 43′ N | 64° 45′ W | 7,486 |
| 19° 44′ N | 64° 47′ W | 7,573 |
| 19° 45′ N | 64° 49′ W | 7,659 |
| 19° 45′ N | 64° 50′ W | 7,747 |
| 19° 46′ N | 64° 52′ W | 7,883 |
| 19° 47′ N | 64° 55′ W | **8,291** |
| 19° 49′ N | 64° 57′ W | 7,902 |
| 19° 44′ N | 64° 53′ W | 7,747 |
| 19° 42′ N | 64° 52′ W | 7,630 |
| 19° 41′ N | 64° 53′ W | 7,630 |
| 19° 40′ N | 64° 53′ W | 7,282 |
| 19° 37′ N | 64° 57′ W | 7,505 |
| 22° 02′ N | 64° 24′ W | 5,846 |
| 22° 06′ N | 64° 23′ W | 5,827 |
| 22° 44′ N | 64° 10′ W | 5,884 |
| 22° 51′ N | 64° 08′ W | 5,846 |
| 22° 59′ N | 64° 04′ W | 5,846 |
| 23° 10′ N | 63° 57′ W | 5,894 |
| 23° 17′ N | 63° 53′ W | 5,846 |
| 23° 25′ N | 63° 49′ W | 5,846 |
| 23° 31′ N | 63° 45′ W | 5,846 |
| 23° 57′ N | 63° 30′ W | 5,896 |
| 24° 03′ N | 63° 27′ W | 5,858 |
| 24° 09′ N | 63° 23′ W | 5,453 |
| 24° 15′ N | 63° 20′ W | 5,858 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 24° 17′ N | 63° 21′ W | 5,800 |
| 24° 17′ N | 63° 25′ W | 5,867 |
| 24° 33′ N | 63° 19′ W | 5,860 |
| 24° 34′ N | 63° 17′ W | 5,860 |
| 24° 35′ N | 63° 13′ W | 5,670 |
| 24° 39′ N | 63° 07′ W | 5,765 |
| 24° 43′ N | 63° 01′ W | 5,690 |
| 24° 50′ N | 62° 50′ W | 6,040 |
| 24° 55′ N | 62° 45′ W | 5,965 |
| 26° 40′ N | 60° 49′ W | 6,244 |
| 26° 47′ N | 60° 44′ W | 6,121 |
| 26° 54′ N | 60° 37′ W | *5,882* |
| 27° 00′ N | 60° 32′ W | 6,054 |
| 27° 01′ N | 60° 30′ W | 6,225 |
| 27° 08′ N | 60° 23′ W | *5,958* |
| 27° 10′ N | 60° 21′ W | *5,769* |
| 27° 13′ N | 60° 18′ W | 6,403 |
| 27° 20′ N | 60° 12′ W | *5,843* |
| 27° 24′ N | 60° 08′ W | *5,834* |
| 27° 26′ N | 60° 06′ W | 6,135 |
| 27° 28′ N | 60° 04′ W | *5,681* |
| 27° 34′ N | 59° 58′ W | *5,398* |
| 27° 40′ N | 59° 53′ W | 6,139 |
| 27° 47′ N | 59° 46′ W | *5,476* |
| 27° 53′ N | 60° 08′ W | *5,930* |
| 27° 57′ N | 60° 21′ W | 6,016 |
| 28° 00′ N | 60° 28′ W | *5,657* |
| 28° 04′ N | 60° 36′ W | 6,111 |
| 28° 06′ N | 60° 40′ W | *5,580* |
| 28° 10′ N | 60° 48′ W | 6,045 |
| 28° 12′ N | 60° 50′ W | *5,809* |
| 28° 15′ N | 60° 51′ W | 6,167 |
| 28° 19′ N | 60° 52′ W | 5,706 |
| 28° 21′ N | 60° 53′ W | 5,513 |
| 28° 25′ N | 60° 54′ W | 5,744 |
| 28° 05′ N | 60° 50′ W | 5,869 |
| 28° 27′ N | 60° 07′ W | 6,215 |
| 28° 29′ N | 60° 03′ W | 5,370 |
| 28° 31′ N | 59° 58′ W | 6,009 |
| 28° 34′ N | 59° 47′ W | 6,253 |
| 28° 38′ N | 59° 46′ W | 5,798 |
| 28° 39′ N | 59° 45′ W | 6,081 |
| 28° 40′ N | 59° 44′ W | 5,739 |
| 28° 43′ N | 59° 35′ W | 5,225 |
| 28° 47′ N | 59° 27′ W | 6,092 |
| 28° 50′ N | 59° 22′ W | 5,273 |
| 28° 53′ N | 59° 13′ W | 5,862 |
| 28° 58′ N | 59° 04′ W | 5,820 |
| 29° 00′ N | 58° 59′ W | 5,438 |
| 29° 02′ N | 58° 54′ W | 6,022 |
| 29° 04′ N | 58° 50′ W | 5,718 |
| 29° 11′ N | 58° 34′ W | 5,878 |
| 29° 12′ N | 58° 32′ W | 5,756 |
| 29° 12′ N | 58° 31′ W | 6,078 |
| 29° 13′ N | 58° 30′ W | 5,793 |
| 29° 14′ N | 58° 29′ W | 6,069 |
| 29° 14′ N | 58° 29′ W | 5,566 |
| 29° 15′ N | 58° 25′ W | 5,834 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 29° 16′ N | 58° 22′ W | 5,392 |
| 29° 17′ N | 58° 20′ W | 5,975 |
| 29° 19′ N | 58° 15′ W | 5,186 |
| 29° 21′ N | 58° 12′ W | 5,750 |
| 29° 21′ N | 58° 09′ W | 5,919 |
| 29° 22′ N | 58° 08′ W | 6,002 |
| 29° 24′ N | 58° 04′ W | 5,309 |
| 29° 25′ N | 58° 01′ W | 5,619 |
| 29° 27′ N | 57° 59′ W | 5,261 |
| 29° 29′ N | 57° 56′ W | 6,116 |
| 29° 30′ N | 57° 53′ W | 6,022 |
| 29° 40′ N | 57° 38′ W | 5,556 |
| 29° 42′ N | 57° 30′ W | 5,066 |
| 29° 44′ N | 57° 27′ W | 5,066 |
| 29° 45′ N | 57° 25′ W | 5,646 |
| 29° 48′ N | 57° 20′ W | 5,417 |
| 29° 49′ N | 57° 19′ W | 5,807 |
| 29° 50′ N | 57° 18′ W | 5,778 |
| 29° 51′ N | 57° 16′ W | 5,788 |
| 29° 55′ N | 57° 09′ W | 5,788 |
| 29° 58′ N | 57° 03′ W | 5,930 |
| 30° 01′ N | 56° 57′ W | 5,180 |
| 30° 03′ N | 56° 54′ W | 5,997 |
| 30° 07′ N | 56° 47′ W | 5,502 |
| 30° 14′ N | 56° 34′ W | 5,684 |
| 30° 16′ N | 56° 31′ W | 5,403 |
| 30° 18′ N | 56° 28′ W | 5,531 |
| 30° 21′ N | 56° 23′ W | 5,294 |
| 30° 22′ N | 56° 20′ W | 5,617 |
| 30° 25′ N | 56° 15′ W | 5,619 |
| 30° 47′ N | 55° 50′ W | 5,624 |
| 30° 51′ N | 55° 43′ W | 5,615 |
| 30° 54′ N | 55° 38′ W | 5,615 |
| 31° 00′ N | 55° 29′ W | 5,601 |
| 31° 07′ N | 55° 18′ W | 5,590 |
| 31° 22′ N | 54° 44′ W | 5,619 |
| 31° 26′ N | 54° 35′ W | 5,601 |
| 31° 31′ N | 54° 23′ W | 5,610 |
| 31° 36′ N | 54° 13′ W | 5,601 |
| 31° 41′ N | 54° 03′ W | 5,610 |
| 31° 45′ N | 53° 55′ W | 5,610 |
| 31° 49′ N | 53° 46′ W | 5,610 |
| 31° 55′ N | 53° 35′ W | 5,619 |
| 31° 59′ N | 53° 25′ W | 5,619 |
| 32° 03′ N | 53° 15′ W | 5,610 |
| 32° 07′ N | 53° 05′ W | *5,624* |
| 32° 11′ N | 52° 57′ W | *5,615* |
| 32° 16′ N | 52° 48′ W | *5,635* |
| 32° 27′ N | 52° 24′ W | 5,538 |
| 32° 31′ N | 52° 16′ W | 4,014 |
| 32° 34′ N | 52° 07′ W | 5,386 |
| 32° 41′ N | 51° 51′ W | 5,424 |
| 32° 46′ N | 51° 41′ W | 5,158 |
| 32° 49′ N | 51° 35′ W | 5,311 |
| 32° 58′ N | 51° 16′ W | 5,506 |
| 32° 59′ N | 51° 14′ W | 5,257 |
| 33° 03′ N | 51° 07′ W | 5,800 |
| 33° 04′ N | 51° 03′ W | 5,678 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 33° 07′ N | 50° 56′ W | 4,995 |
| 33° 09′ N | 50° 53′ W | 4,789 |
| 33° 10′ N | 50° 45′ W | 4,789 |
| 33° 09′ N | 50° 38′ W | 5,487 |
| 33° 09′ N | 50° 34′ W | 5,315 |
| 33° 09′ N | 50° 30′ W | *4,874* |
| 33° 07′ N | 50° 27′ W | 5,430 |
| 33° 09′ N | 50° 24′ W | *4,994* |
| 33° 09′ N | 50° 19′ W | *4,712* |
| 33° 10′ N | 50° 17′ W | 5,487 |
| 33° 10′ N | 50° 15′ W | 5,071 |
| 33° 11′ N | 50° 11′ W | *4,459* |
| 33° 11′ N | 50° 06′ W | 5,324 |
| 33° 12′ N | 50° 03′ W | 5,305 |
| 33° 13′ N | 49° 57′ W | 5,268 |
| 33° 14′ N | 49° 45′ W | 5,343 |
| 33° 15′ N | 49° 41′ W | *4,573* |
| 33° 15′ N | 49° 36′ W | *4,592* |
| 33° 17′ N | 49° 28′ W | 5,305 |
| 33° 18′ N | 49° 22′ W | 5,456 |
| 33° 18′ N | 49° 17′ W | 4,309 |
| 33° 19′ N | 49° 14′ W | 4,579 |
| 33° 20′ N | 49° 09′ W | 5,230 |
| 33° 18′ N | 49° 07′ W | 5,023 |
| 33° 16′ N | 49° 07′ W | 5,517 |
| 33° 11′ N | 49° 07′ W | 5,467 |
| 33° 16′ N | 49° 00′ W | 5,508 |
| 33° 18′ N | 48° 55′ W | 5,517 |
| 33° 20′ N | 48° 51′ W | 4,906 |
| 33° 23′ N | 48° 44′ W | 5,366 |
| 33° 25′ N | 48° 40′ W | 5,224 |
| 33° 30′ N | 48° 31′ W | 5,180 |
| 33° 33′ N | 48° 25′ W | 4,974 |
| 33° 35′ N | 48° 19′ W | 4,655 |
| 33° 37′ N | 48° 14′ W | 5,125 |
| 33° 40′ N | 48° 10′ W | 4,983 |
| 33° 43′ N | 48° 04′ W | 5,180 |
| 33° 46′ N | 47° 56′ W | 4,702 |
| 33° 49′ N | 47° 51′ W | 4,377 |
| 33° 52′ N | 47° 45′ W | 4,669 |
| 34° 01′ N | 47° 23′ W | 4,512 |
| 34° 10′ N | 46° 57′ W | *3,925* |
| 34° 10′ N | 46° 53′ W | 4,989 |
| 34° 11′ N | 46° 47′ W | *3,990* |
| 34° 11′ N | 46° 45′ W | 4,482 |
| 34° 11′ N | 46° 43′ W | 4,799 |
| 34° 11′ N | 46° 38′ W | *5,101* |
| 34° 11′ N | 46° 30′ W | 4,764 |
| 34° 11′ N | 46° 26′ W | 4,049 |
| 34° 11′ N | 46° 24′ W | 4,259 |
| 34° 11′ N | 46° 22′ W | 4,111 |
| 34° 11′ N | 46° 16′ W | 4,645 |
| 34° 06′ N | 46° 09′ W | 4,404 |
| 34° 13′ N | 45° 53′ W | 4,702 |
| 34° 16′ N | 45° 44′ W | 4,443 |
| 34° 18′ N | 45° 40′ W | *5,133* |
| 34° 20′ N | 45° 35′ W | 4,425 |
| 34° 26′ N | 45° 20′ W | *5,108* |
| 34° 27′ N | 45° 18′ W | *5,051* |
| 34° 33′ N | 45° 04′ W | 4,437 |
| 34° 35′ N | 44° 57′ W | 4,512 |
| 34° 40′ N | 44° 47′ W | 4,437 |
| 34° 41′ N | 44° 43′ W | 4,320 |
| 34° 48′ N | 44° 27′ W | 4,368 |
| 34° 52′ N | 44° 18′ W | 4,339 |
| 34° 53′ N | 44° 16′ W | 4,088 |
| 34° 54′ N | 44° 15′ W | 4,291 |
| 34° 56′ N | 44° 20′ W | 4,302 |
| 34° 57′ N | 44° 18′ W | 4,001 |
| 35° 03′ N | 44° 13′ W | 4,280 |
| 35° 07′ N | 44° 09′ W | 4,500 |
| 35° 15′ N | 44° 02′ W | **2,830** |
| 35° 21′ N | 43° 56′ W | 4,180 |
| 35° 23′ N | 43° 54′ W | 4,068 |
| 35° 25′ N | 43° 52′ W | 4,538 |
| 35° 31′ N | 43° 47′ W | 4,861 |
| 35° 37′ N | 43° 42′ W | 4,802 |
| 35° 46′ N | 43° 34′ W | 4,257 |
| 35° 50′ N | 43° 30′ W | 4,388 |
| 36° 03′ N | 43° 16′ W | 4,898 |
| 36° 11′ N | 43° 07′ W | 4,888 |
| 36° 17′ N | 43° 00′ W | 4,798 |
| 36° 18′ N | 43° 00′ W | 4,868 |
| 36° 19′ N | 42° 59′ W | 4,798 |
| 36° 23′ N | 42° 56′ W | 4,698 |
| 36° 24′ N | 42° 55′ W | 4,586 |
| 36° 24′ N | 43° 01′ W | 4,276 |
| 36° 18′ N | 43° 04′ W | 4,285 |
| 36° 39′ N | 42° 14′ W | 4,629 |
| 36° 44′ N | 42° 07′ W | 4,666 |
| 36° 51′ N | 41° 58′ W | 4,721 |
| 36° 57′ N | 41° 51′ W | 4,764 |
| 37° 29′ N | 41° 53′ W | 4,612 |
| 37° 36′ N | 41° 50′ W | 4,933 |
| 37° 37′ N | 41° 40′ W | 4,994 |
| 37° 41′ N | 41° 35′ W | 4,918 |
| 37° 45′ N | 41° 30′ W | *5,102* |
| 37° 49′ N | 41° 28′ W | *3,966* |
| 37° 54′ N | 41° 25′ W | 4,886 |
| 38° 01′ N | 41° 20′ W | 4,416 |
| 38° 08′ N | 41° 15′ W | 4,840 |
| 38° 17′ N | 41° 08′ W | 4,604 |
| 38° 22′ N | 41° 05′ W | 4,849 |
| 38° 34′ N | 40° 56′ W | *5,038* |
| 38° 42′ N | 40° 51′ W | 4,961 |
| 38° 44′ N | 40° 48′ W | 4,648 |
| 38° 49′ N | 40° 47′ W | 4,849 |
| 38° 58′ N | 40° 44′ W | *5,046* |
| 39° 01′ N | 40° 44′ W | *5,178* |
| 39° 11′ N | 40° 36′ W | 4,990 |
| 39° 15′ N | 40° 34′ W | 4,933 |
| 39° 22′ N | 40° 29′ W | 4,535 |
| 39° 25′ N | 40° 27′ W | 4,670 |
| 39° 33′ N | 40° 16′ W | 4,745 |
| 39° 37′ N | 40° 12′ W | 4,409 |
| 39° 41′ N | 40° 07′ W | 4,632 |
| 39° 48′ N | 40° 00′ W | 4,632 |
| 39° 51′ N | 39° 56′ W | 4,577 |
| 39° 52′ N | 39° 54′ W | 4,614 |
| 39° 56′ N | 39° 46′ W | 4,655 |
| 40° 00′ N | 39° 38′ W | 4,774 |
| 40° 05′ N | 39° 25′ W | 4,877 |
| 40° 07′ N | 39° 22′ W | *5,046* |
| 40° 11′ N | 39° 13′ W | 4,571 |
| 40° 14′ N | 39° 07′ W | 4,704 |
| 40° 18′ N | 38° 57′ W | 4,893 |
| 40° 24′ N | 38° 44′ W | 4,855 |
| 40° 24′ N | 38° 29′ W | 4,666 |
| 40° 28′ N | 38° 25′ W | 4,441 |
| 40° 31′ N | 38° 21′ W | 4,356 |

PROFILE 23.

| | | |
|---|---|---|
| 40° 31′ N | 38° 16′ W | 4,102 |
| 40° 32′ N | 38° 07′ W | 4,798 |
| 40° 33′ N | 37° 57′ W | 4,722 |
| 40° 34′ N | 37° 48′ W | 4,830 |
| 40° 35′ N | 37° 38′ W | 4,802 |
| 40° 27′ N | 37° 34′ W | 4,821 |
| 40° 27′ N | 37° 34′ W | 4,727 |
| 40° 28′ N | 37° 20′ W | 4,397 |
| 40° 29′ N | 37° 06′ W | 4,567 |
| 40° 30′ N | 37° 00′ W | 4,605 |
| 40° 30′ N | 36° 54′ W | 4,341 |
| 40° 32′ N | 36° 24′ W | 4,657 |
| 40° 32′ N | 36° 19′ W | 4,285 |
| 40° 30′ N | 36° 19′ W | 4,547 |
| 40° 30′ N | 36° 13′ W | 4,341 |
| 40° 30′ N | 36° 12′ W | 4,379 |
| 40° 30′ N | 36° 11′ W | 4,369 |
| 40° 30′ N | 36° 07′ W | 4,263 |
| 40° 33′ N | 35° 44′ W | 4,642 |
| 40° 34′ N | 35° 41′ W | 4,465 |
| 40° 35′ N | 35° 34′ W | 4,510 |
| 40° 36′ N | 35° 26′ W | 4,255 |
| 40° 27′ N | 35° 37′ W | 4,521 |
| 40° 42′ N | 34° 54′ W | 4,149 |
| 40° 44′ N | 34° 49′ W | 4,130 |
| 40° 42′ N | 34° 49′ W | 4,130 |
| 40° 45′ N | 34° 42′ W | 4,068 |
| 40° 45′ N | 34° 40′ W | 3,525 |
| 40° 49′ N | 34° 33′ W | 4,032 |
| 40° 51′ N | 34° 23′ W | 3,884 |
| 40° 53′ N | 34° 13′ W | 3,214 |
| 40° 49′ N | 33° 58′ W | 3,680 |
| 40° 50′ N | 33° 53′ W | 3,977 |
| 40° 52′ N | 33° 43′ W | 3,540 |
| 40° 53′ N | 33° 34′ W | 3,615 |
| 40° 53′ N | 33° 26′ W | 3,654 |
| 40° 55′ N | 33° 14′ W | 3,784 |
| 40° 56′ N | 33° 06′ W | 3,245 |
| 40° 58′ N | 32° 55′ W | 3,347 |
| 41° 01′ N | 32° 29′ W | 3,208 |
| 41° 03′ N | 32° 15′ W | 2,878 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 41° 04′ N | 32° 08′ W | 2,860 |
| 41° 05′ N | 32° 04′ W | 2,893 |
| 41° 06′ N | 31° 58′ W | 2,653 |
| 41° 07′ N | 31° 55′ W | 2,525 |
| 41° 08′ N | 31° 50′ W | 2,635 |
| 41° 09′ N | 31° 44′ W | 2,671 |
| 41° 12′ N | 31° 27′ W | 2,635 |
| 41° 13′ N | 31° 25′ W | 2,616 |
| 41° 15′ N | 31° 15′ W | 2,487 |
| 41° 17′ N | 31° 05′ W | 2,206 |
| 41° 18′ N | 31° 03′ W | 1,890 |
| 41° 20′ N | 30° 52′ W | 2,215 |
| 41° 21′ N | 30° 43′ W | 2,279 |
| 41° 23′ N | 30° 32′ W | *1,977* |
| 41° 25′ N | 30° 26′ W | 2,554 |
| 41° 25′ N | 30° 22′ W | 1,964 |
| 41° 25′ N | 30° 21′ W | 2,312 |
| 41° 26′ N | 30° 19′ W | 2,440 |
| 41° 26′ N | 30° 17′ W | 2,418 |
| 41° 30′ N | 29° 57′ W | 2,372 |
| 41° 31′ N | 29° 52′ W | 1,815 |
| 41° 32′ N | 29° 47′ W | *2,308* |
| 41° 30′ N | 29° 48′ W | 1,805 |
| 41° 30′ N | 29° 45′ W | 2,032 |
| 41° 31′ N | 29° 43′ W | 1,756 |
| 41° 31′ N | 29° 42′ W | 2,121 |
| 41° 31′ N | 29° 40′ W | 1,756 |
| 41° 31′ N | 29° 37′ W | 2,121 |
| 41° 31′ N | 29° 36′ W | 1,993 |
| 41° 32′ N | 29° 33′ W | **1,281** |
| 41° 34′ N | 29° 28′ W | 1,756 |
| 41° 34′ N | 29° 26′ W | 1,536 |
| 41° 35′ N | 29° 23′ W | *2,492* |
| 41° 36′ N | 29° 19′ W | 3,101 |
| 41° 37′ N | 29° 15′ W | *2,758* |
| 41° 37′ N | 29° 10′ W | 2,199 |
| 41° 39′ N | 29° 01′ W | 1,906 |
| 41° 41′ N | 28° 54′ W | 2,071 |
| 41° 41′ N | 28° 50′ W | 2,510 |
| 41° 43′ N | 28° 40′ W | 2,317 |
| 41° 45′ N | 28° 35′ W | 2,018 |
| 41° 46′ N | 28° 32′ W | 2,565 |
| 41° 47′ N | 28° 23′ W | 2,235 |
| 41° 48′ N | 28° 16′ W | 2,731 |
| 41° 49′ N | 28° 10′ W | 2,520 |
| 41° 50′ N | 28° 07′ W | 2,731 |
| 41° 53′ N | 27° 55′ W | 2,529 |
| 41° 57′ N | 27° 35′ W | 2,563 |
| 42° 00′ N | 27° 20′ W | 2,692 |
| 42° 05′ N | 26° 57′ W | 2,893 |
| 42° 06′ N | 26° 53′ W | 2,288 |
| 42° 07′ N | 26° 48′ W | 3,109 |
| 42° 09′ N | 26° 37′ W | 3,202 |
| 42° 10′ N | 26° 36′ W | 3,202 |
| 42° 11′ N | 26° 28′ W | 2,778 |
| 42° 13′ N | 26° 16′ W | 3,169 |
| 42° 22′ N | 26° 05′ W | 3,501 |
| 42° 23′ N | 26° 02′ W | 3,492 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 42° 22′ N | 26° 00′ W | 3,492 |
| 42° 16′ N | 25° 52′ W | 3,465 |
| 42° 15′ N | 25° 49′ W | 3,054 |
| 42° 15′ N | 25° 48′ W | 3,414 |
| 42° 11′ N | 25° 45′ W | 3,423 |
| 42° 06′ N | 25° 38′ W | 3,129 |
| 41° 59′ N | 25° 29′ W | 3,405 |
| 41° 54′ N | 25° 23′ W | 3,460 |
| 41° 46′ N | 25° 13′ W | 3,674 |
| 41° 44′ N | 25° 10′ W | 3,551 |
| 41° 42′ N | 25° 08′ W | 3,598 |
| 41° 37′ N | 25° 00′ W | 3,511 |
| 41° 34′ N | 24° 56′ W | 3,235 |
| 41° 29′ N | 24° 49′ W | 3,567 |
| 41° 21′ N | 24° 40′ W | 3,558 |
| 41° 10′ N | 24° 25′ W | 3,754 |
| 41° 01′ N | 24° 26′ W | 3,809 |
| 41° 00′ N | 24° 25′ W | 3,754 |
| 41° 00′ N | 24° 23′ W | 3,652 |
| 41° 04′ N | 24° 16′ W | 3,493 |
| 41° 09′ N | 24° 05′ W | 3,680 |
| 41° 11′ N | 23° 59′ W | 3,836 |
| 41° 12′ N | 23° 55′ W | 3,520 |
| 41° 13′ N | 23° 54′ W | 3,884 |
| 41° 19′ N | 23° 41′ W | 3,772 |
| 41° 19′ N | 23° 38′ W | 3,581 |
| 41° 21′ N | 23° 34′ W | 3,734 |
| 41° 24′ N | 23° 29′ W | 3,626 |
| 41° 29′ N | 23° 28′ W | 3,880 |
| 41° 30′ N | 23° 28′ W | 3,471 |
| 41° 30′ N | 23° 27′ W | 3,693 |
| 41° 35′ N | 23° 08′ W | 3,805 |
| 41° 37′ N | 23° 05′ W | *4,168* |
| 41° 38′ N | 23° 03′ W | *4,177* |
| 41° 42′ N | 22° 54′ W | 3,918 |
| 41° 44′ N | 22° 51′ W | *4,065* |
| 41° 49′ N | 22° 41′ W | 3,823 |
| 41° 52′ N | 22° 33′ W | 3,596 |
| 41° 56′ N | 22° 25′ W | 4,022 |
| 42° 03′ N | 22° 11′ W | 3,816 |
| 42° 11′ N | 21° 53′ W | 3,873 |
| 42° 15′ N | 21° 46′ W | 3,948 |
| 42° 17′ N | 21° 36′ W | 3,929 |
| 42° 19′ N | 21° 32′ W | 4,031 |
| 42° 25′ N | 21° 27′ W | 3,760 |
| 42° 26′ N | 21° 26′ W | 3,613 |
| 42° 31′ N | 21° 07′ W | 3,389 |
| 42° 36′ N | 20° 56′ W | 3,776 |
| 42° 39′ N | 20° 50′ W | 4,009 |
| 42° 42′ N | 20° 43′ W | 3,266 |
| 42° 43′ N | 20° 41′ W | 4,308 |
| 42° 47′ N | 20° 34′ W. | 4,429 |
| 42° 53′ N | 20° 19′ W | 5,331 |
| 42° 56′ N | 20° 10′ W | 3,282 |
| 43° 02′ N | 19° 52′ W | 4,856 |
| 43° 05′ N | 19° 44′ W | 5,035 |
| 43° 06′ N | 19° 40′ W | 4,733 |
| 43° 07′ N | 19° 38′ W | 5,306 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 43° 10′ N | 19° 29′ W | 5,933 |
| 43° 08′ N | 19° 39′ W | 5,905 |
| 43° 11′ N | 19° 41′ W | **5,978** |
| 43° 12′ N | 19° 40′ W | 4,378 |
| 43° 13′ N | 19° 39′ W | *3,726* |
| 43° 17′ N | 19° 22′ W | 4,323 |
| 43° 21′ N | 19° 17′ W | *3,932* |
| 43° 24′ N | 19° 13′ W | *3,801* |
| 43° 25′ N | 19° 12′ W | *3,941* |
| 43° 30′ N | 19° 04′ W | 5,014 |
| 43° 37′ N | 18° 55′ W | 4,967 |
| 43° 41′ N | 18° 49′ W | 4,903 |
| 43° 30′ N | 18° 52′ W | 4,308 |
| 43° 34′ N | 18° 45′ W | 4,236 |
| 43° 37′ N | 18° 41′ W | 4,822 |
| 43° 42′ N | 18° 31′ W | 4,860 |
| 43° 43′ N | 18° 29′ W | 4,491 |
| 43° 48′ N | 18° 21′ W | 4,509 |
| 43° 51′ N | 18° 16′ W | 4,615 |
| 43° 54′ N | 18° 12′ W | 4,831 |
| 43° 55′ N | 18° 11′ W | 4,149 |
| 43° 56′ N | 18° 10′ W | 4,373 |
| 43° 58′ N | 18° 05′ W | 4,579 |
| 44° 01′ N | 18° 01′ W | 4,541 |
| 44° 05′ N | 17° 53′ W | 4,429 |
| 44° 07′ N | 17° 49′ W | 4,615 |
| 44° 10′ N | 17° 45′ W | 4,261 |
| 44° 12′ N | 17° 41′ W | 4,560 |
| 44° 15′ N | 17° 36′ W | 4,554 |
| 44° 22′ N | 17° 25′ W | 4,761 |
| 44° 26′ N | 17° 19′ W | 4,292 |
| 44° 29′ N | 17° 14′ W | 3,642 |
| 44° 32′ N | 17° 09′ W | 4,099 |
| 44° 35′ N | 17° 04′ W | 4,183 |
| 44° 37′ N | 17° 00′ W | 3,916 |
| 44° 40′ N | 16° 55′ W | 4,061 |
| 44° 44′ N | 16° 48′ W | 3,557 |
| 44° 45′ N | 16° 45′ W | 3,689 |
| 44° 51′ N | 16° 39′ W | 4,095 |
| 44° 56′ N | 16° 32′ W | 4,536 |
| 45° 00′ N | 16° 27′ W | 4,903 |
| 45° 03′ N | 16° 23′ W | 4,874 |
| 45° 05′ N | 16° 20′ W | 4,434 |
| 45° 11′ N | 16° 13′ W | 3,615 |
| 45° 16′ N | 16° 07′ W | 4,321 |
| 45° 20′ N | 16° 01′ W | 4,345 |
| 45° 24′ N | 15° 56′ W | 4,074 |
| 45° 27′ N | 15° 51′ W | 4,495 |
| 45° 31′ N | 15° 46′ W | 4,652 |
| 45° 35′ N | 15° 41′ W | 4,756 |
| 45° 40′ N | 15° 36′ W | 4,652 |
| 45° 48′ N | 15° 26′ W | 4,520 |
| 45° 52′ N | 15° 20′ W | 4,624 |
| 45° 57′ N | 15° 15′ W | 4,652 |
| 46° 01′ N | 15° 10′ W | 4,233 |
| 46° 05′ N | 15° 05′ W | 4,513 |
| 46° 11′ N | 14° 57′ W | *3,993* |
| 46° 16′ N | 14° 52′ W | 4,159 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 46° 19′ N | 14° 48′ W | 4,401 |
| 46° 23′ N | 14° 42′ W | 4,737 |
| 46° 27′ N | 14° 37′ W | 4,840 |
| 46° 31′ N | 14° 32′ W | 4,860 |
| 46° 35′ N | 14° 26′ W | 4,860 |
| 46° 39′ N | 14° 21′ W | 4,671 |
| 46° 43′ N | 14° 15′ W | 4,878 |
| 46° 48′ N | 14° 10′ W | 4,831 |
| 46° 53′ N | 14° 04′ W | 4,860 |
| 46° 57′ N | 13° 58′ W | 4,746 |
| 47° 00′ N | 13° 54′ W | 4,849 |
| 47° 05′ N | 13° 47′ W | 4,849 |
| 47° 10′ N | 13° 41′ W | 4,774 |
| 47° 14′ N | 13° 35′ W | 4,812 |
| 47° 18′ N | 13° 30′ W | 4,783 |
| 47° 31′ N | 13° 13′ W | 4,765 |
| 47° 36′ N | 13° 07′ W | 4,708 |
| 47° 40′ N | 13° 00′ W | 4,642 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 47° 45′ N | 12° 54′ W | *3,963* |
| 47° 47′ N | 12° 51′ W | 4,196 |
| 47° 50′ N | 12° 48′ W | 4,140 |
| 47° 50′ N | 12° 47′ W | 4,270 |
| 47° 53′ N | 12° 39′ W | 4,551 |
| 47° 55′ N | 12° 33′ W | 4,551 |
| 47° 58′ N | 12° 26′ W | 3,232 |
| 48° 00′ N | 12° 21′ W | 4,392 |
| 48° 02′ N | 12° 14′ W | 4,401 |
| 48° 04′ N | 12° 08′ W | 3,371 |
| 48° 07′ N | 12° 01′ W | 3,647 |
| 48° 08′ N | 11° 58′ W | 3,647 |
| 48° 11′ N | 11° 52′ W | 3,579 |
| 48° 13′ N | 11° 54′ W | 3,541 |
| 48° 12′ N | 11° 52′ W | 3,541 |
| 48° 10′ N | 11° 47′ W | 3,550 |
| 48° 08′ N | 11° 44′ W | 2,807 |
| 48° 08′ N | 11° 43′ W | 3,374 |

| Position | | Depth in m |
|---|---|---|
| Lat. | Long. | |
| 48° 05′ N | 11° 39′ W | 3,744 |
| 48° 07′ N | 11° 31′ W | 4,164 |
| 48° 12′ N | 11° 14′ W | 4,042 |
| 48° 14′ N | 11° 06′ W | 2,886 |
| 48° 16′ N | 10° 58′ W | 2,381 |
| 48° 18′ N | 10° 52′ W | 3,006 |
| 48° 20′ N | 10° 45′ W | 2,868 |
| 48° 22′ N | 10° 38′ W | 2,154 |
| 48° 24′ N | 10° 32′ W | 1,752 |
| 48° 26′ N | 10° 26′ W | 2,924 |
| 48° 28′ N | 10° 18′ W | 1,023 |
| 48° 29′ N | 10° 17′ W | 1,096 |
| 48° 30′ N | 10° 14′ W | 860 |
| 48° 31′ N | 10° 12′ W | 1,279 |
| 48° 31′ N | 10° 09′ W | 878 |
| 48° 32′ N | 10° 07′ W | 1,261 |
| 48° 33′ N | 10° 05′ W | 978 |
| 48° 33′ N | 10° 04′ W | 1,032 |

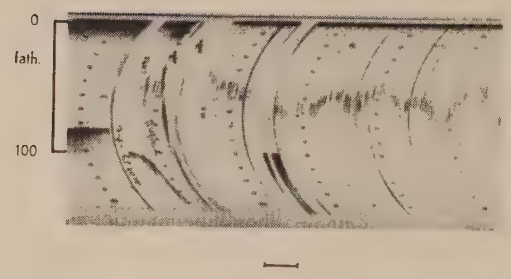
BATROSS 1947 - 1948

INSTITUTET
HOLM 1955

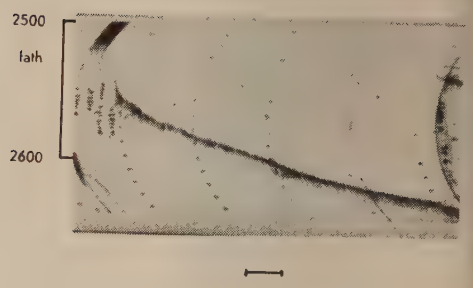
# GRAPHICAL REPRESENTATION OF MAIN PROFILES, DETAILED PROFILES, AND PHOTOGRAPHIC REPRODUCTION OF ECHOGRAMS

PROFILE 1.

1 – A

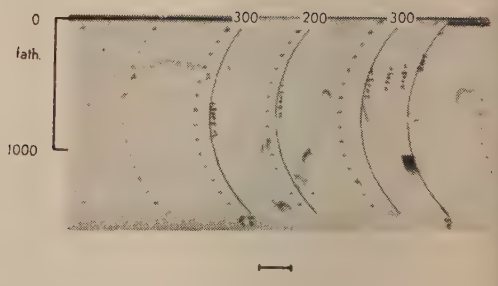



1 – B

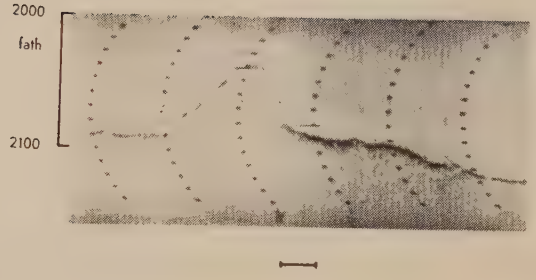



1 – C

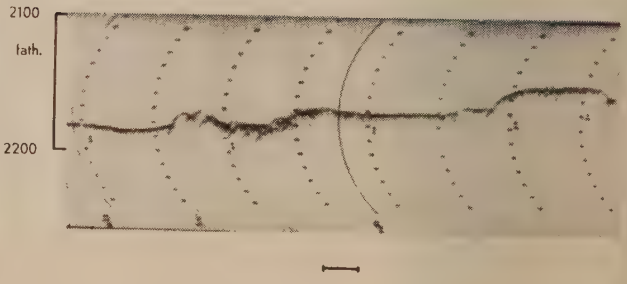
1 – D



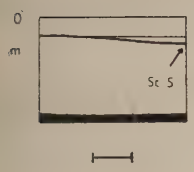

1 – E



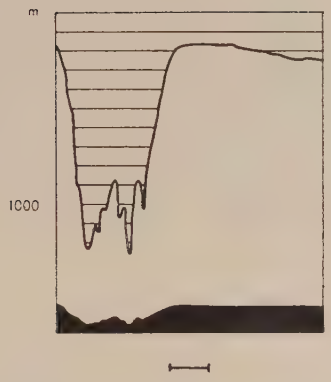

1 – F



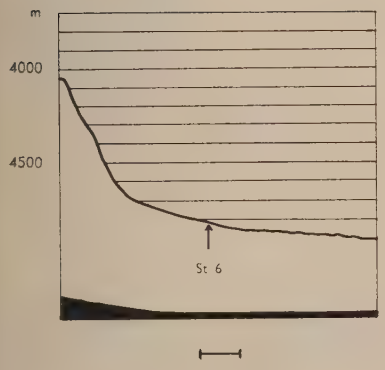
1–1



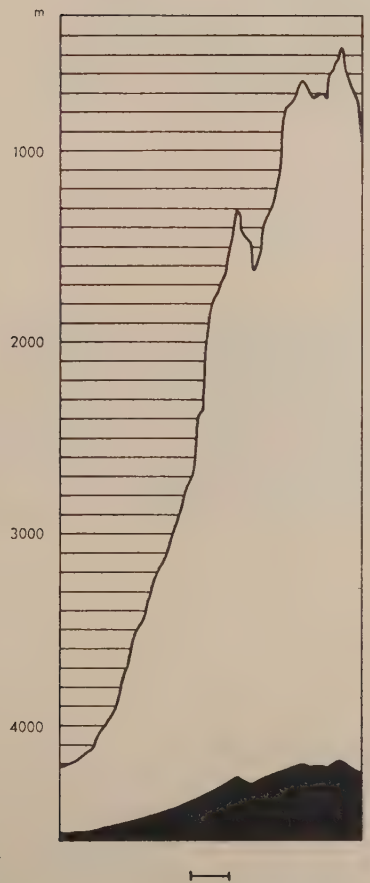

1–2



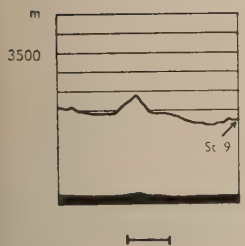

1–3




1–4

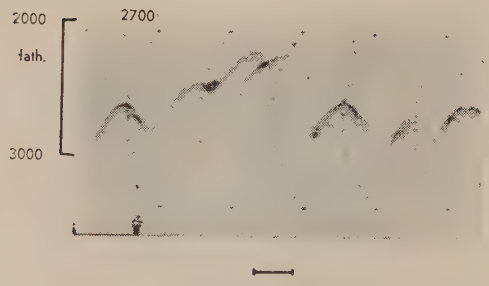



1–5

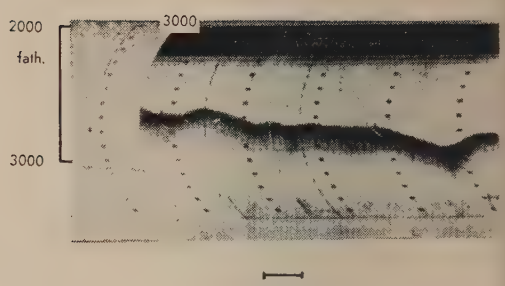


PROFILE 2.

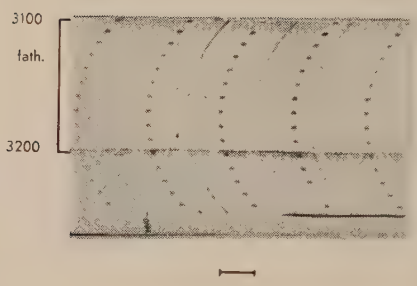
2 – A



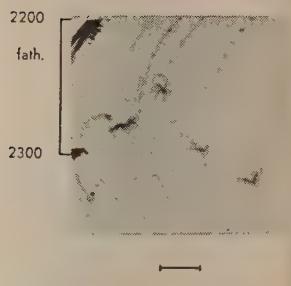

2 – B



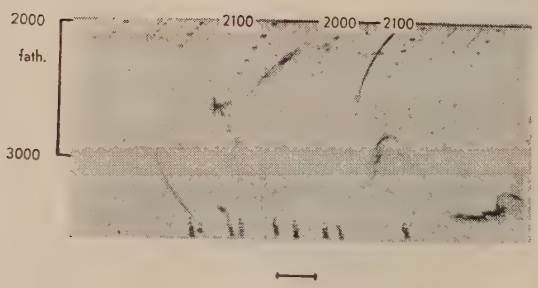

2 – C



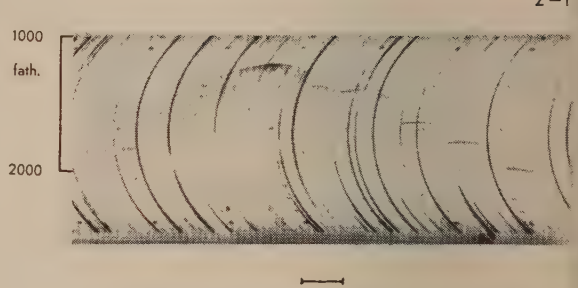

2 – D




2 – E




2 – F

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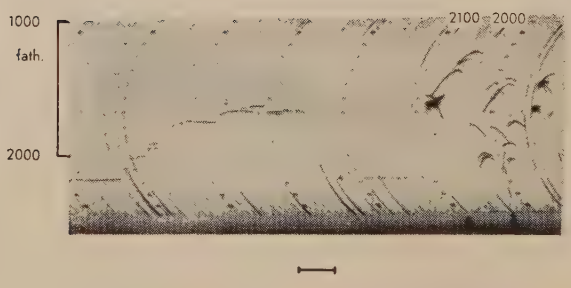
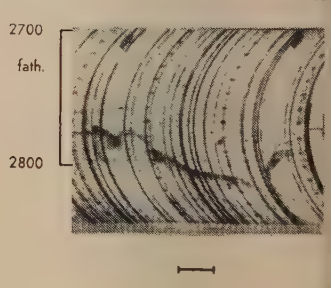
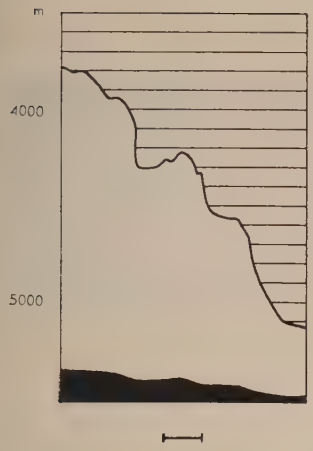


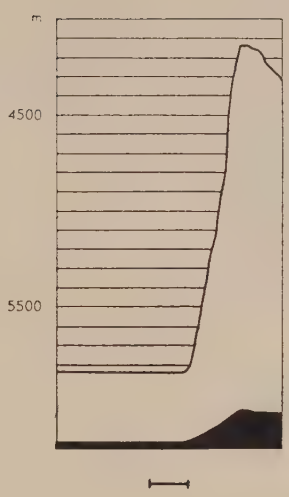

2 – H



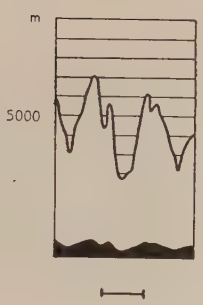
2–1



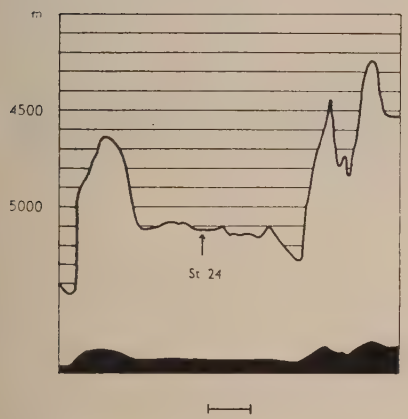

2–2



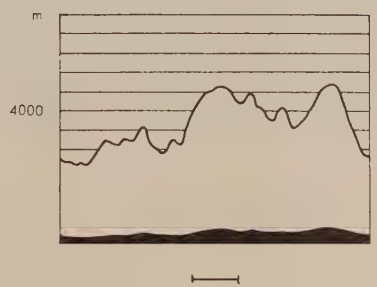

2–3




2–4




2–5

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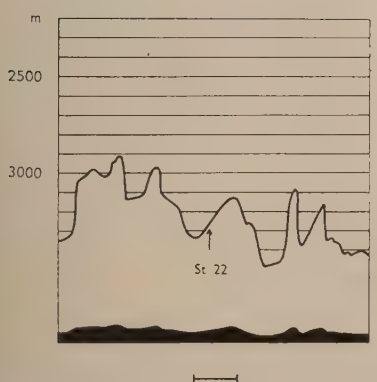


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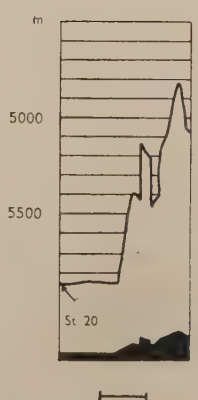
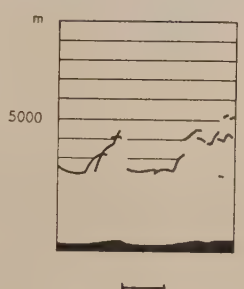
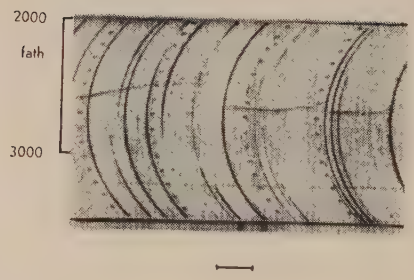


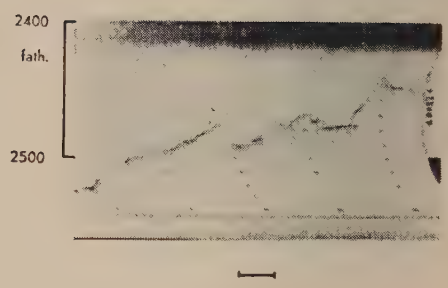

2–8



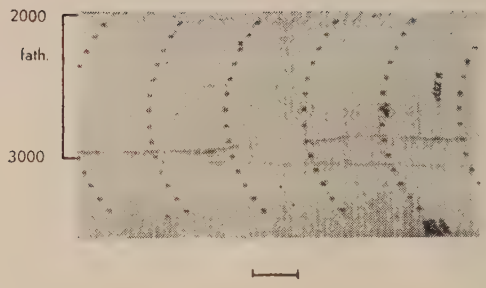
2 – I



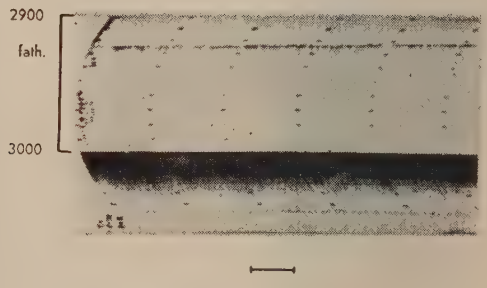

2 – K




2 – L



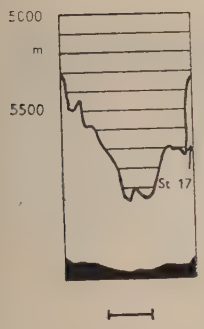

2 – M



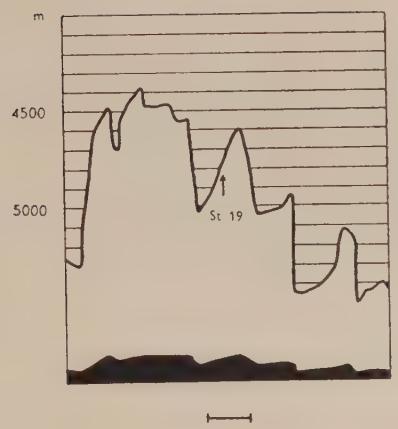

2 – N

2 – O

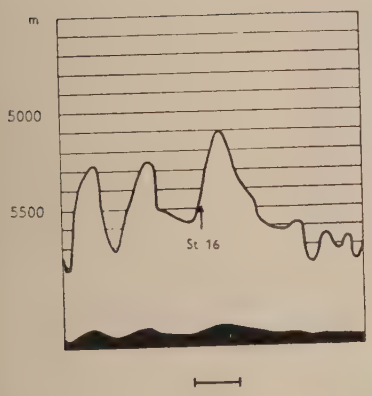
2–10




2–9

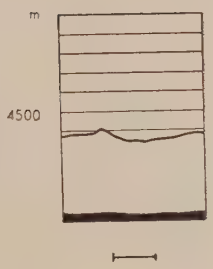



2–11

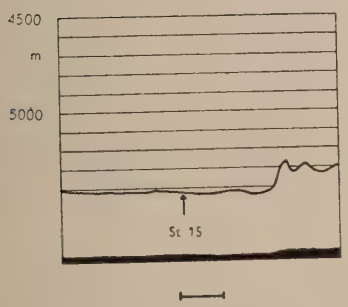



2–12

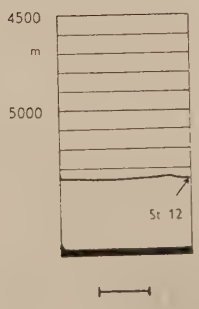
2–13



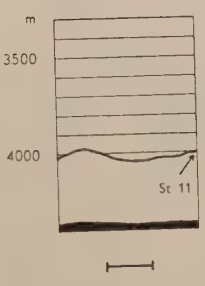

2–14




2–15

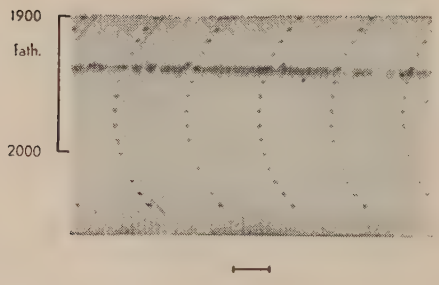



2–16

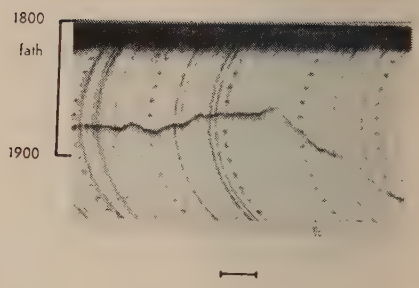


PROFILE 3.

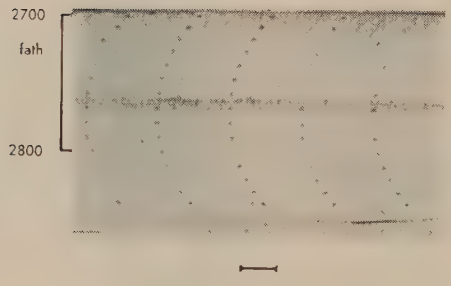
3 – A



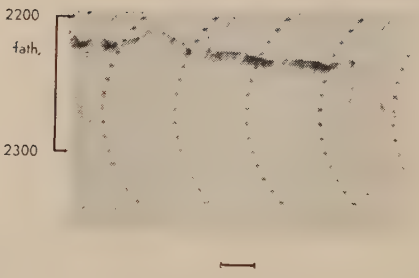

3 – B



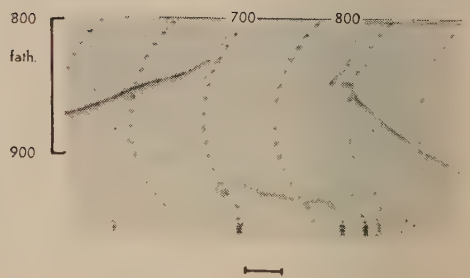

3 – C



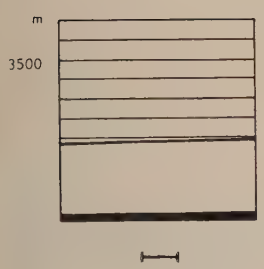

3 – D



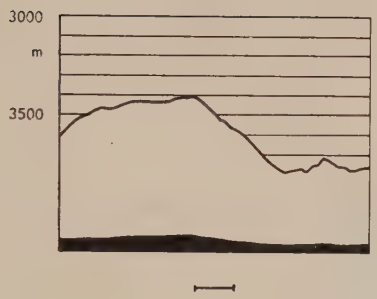

3 – E



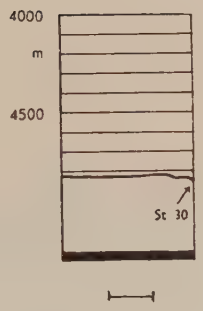
3–1



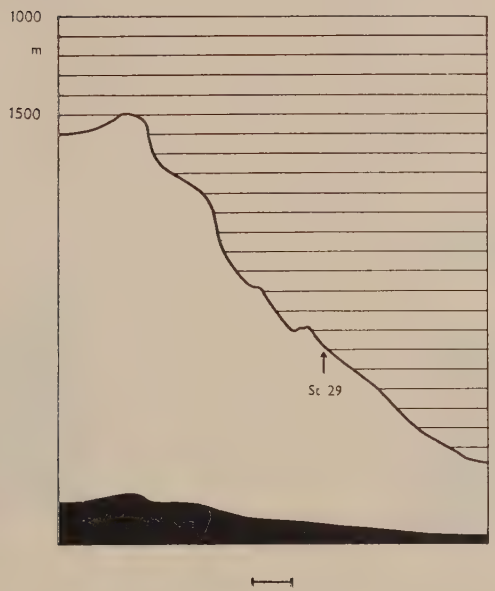

3–2



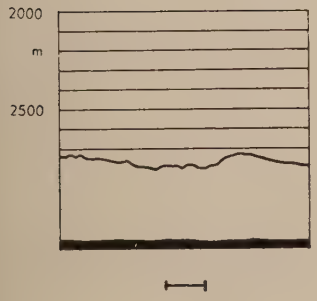

3–3



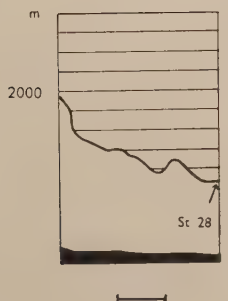

3–4




3–5

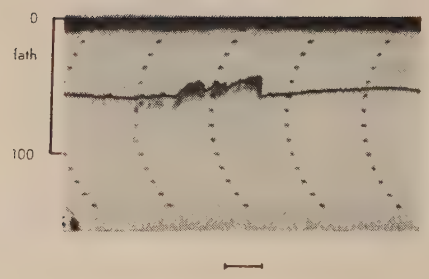



3–6

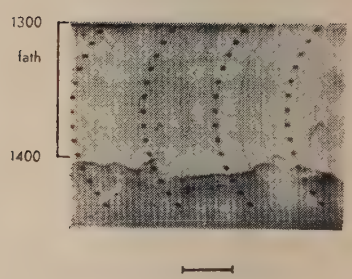


PROFILE 4.

4 – A

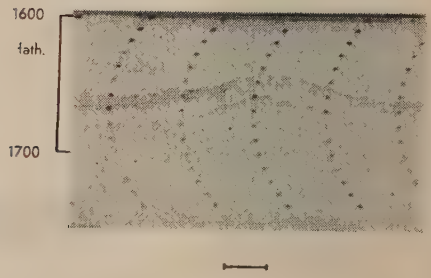


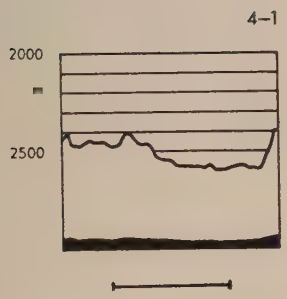

4 – B

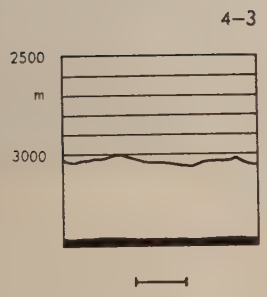


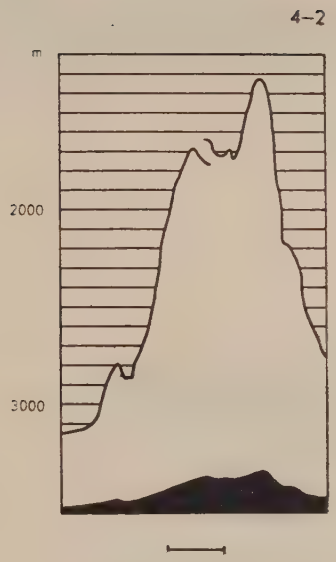

4 – C

4 – D



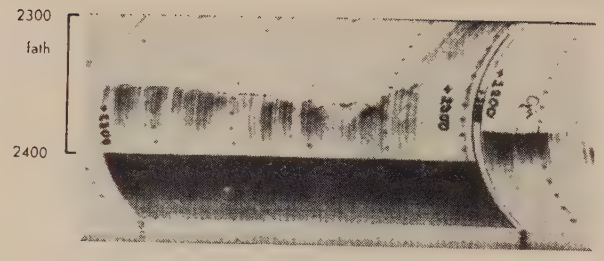

4–1
2000
m
2500


4–3
2500
m
3000

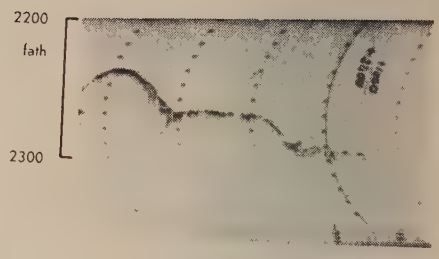

4–2
m
2000
3000

PROFILE 5.

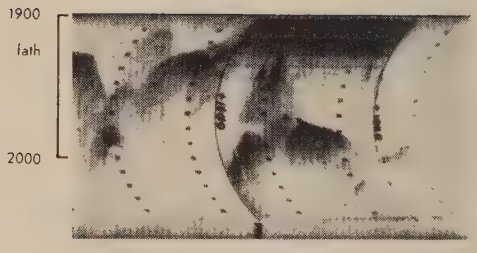
5 – A




5 – B

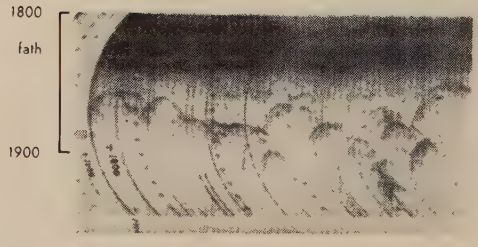



5 – C

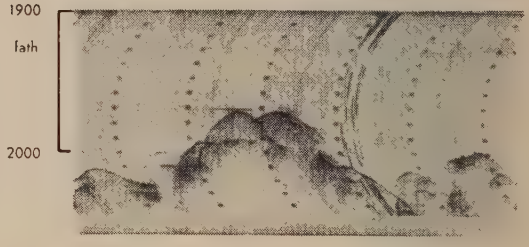



5 – D

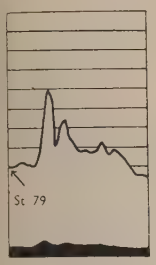
5 – E



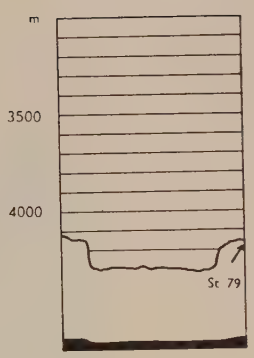

5 – F



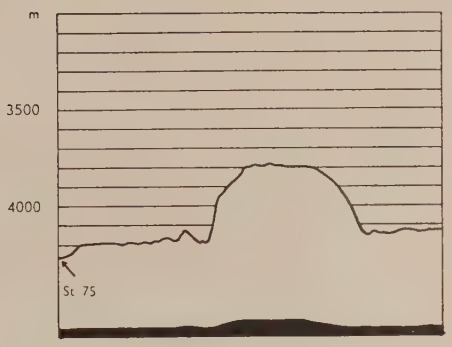
5–1



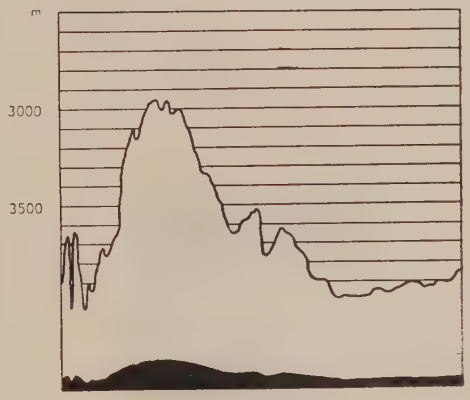

5–1 A




5–2




5–5

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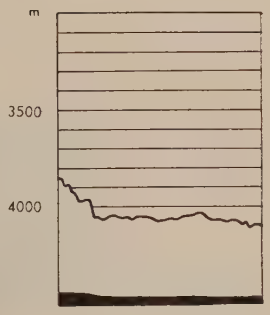


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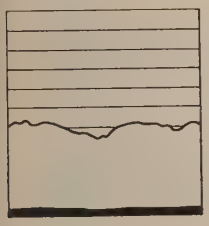

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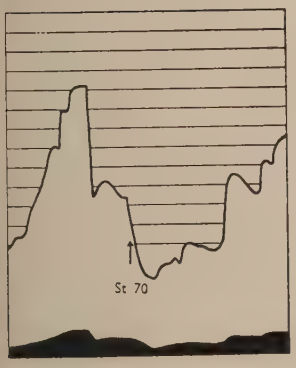


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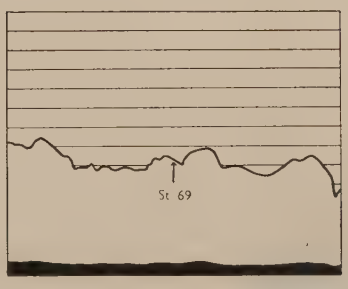


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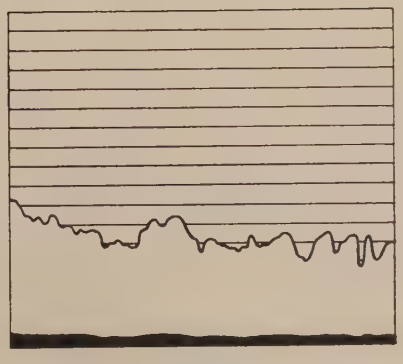
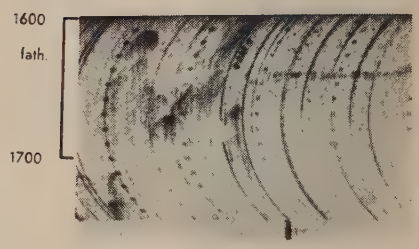


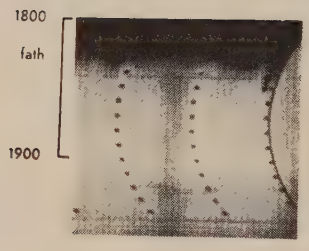
5 – H

1600
fath
1700

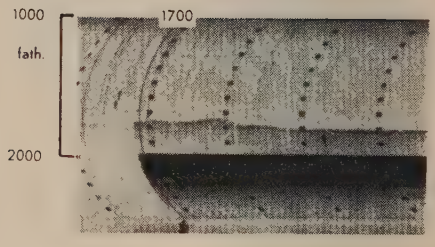
5 – G


1600
fath.
1700

5 – I


1800
fath
1900

5 – K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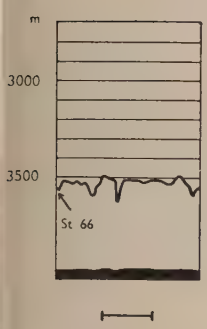
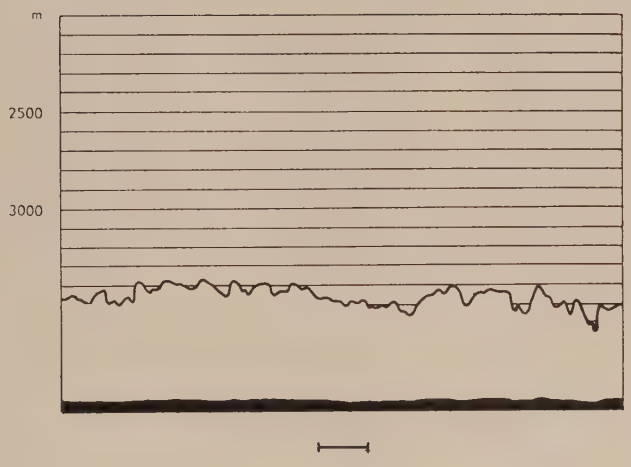
fath.
1700
2000

5–9




5–10

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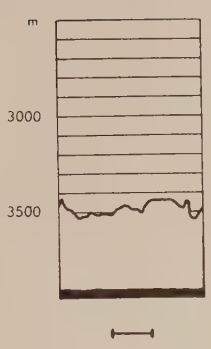


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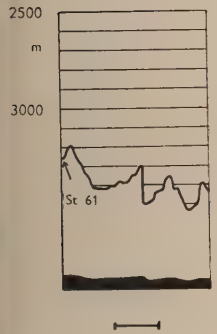


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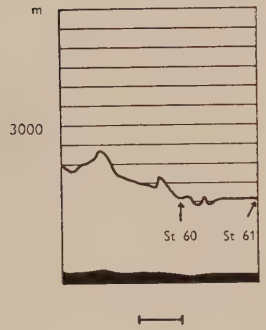


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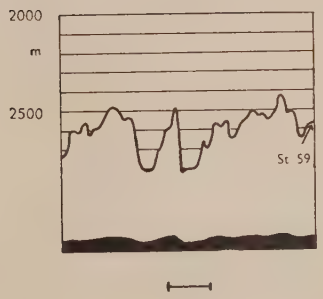


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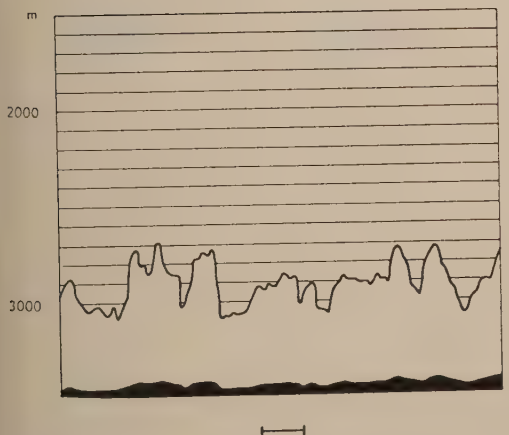


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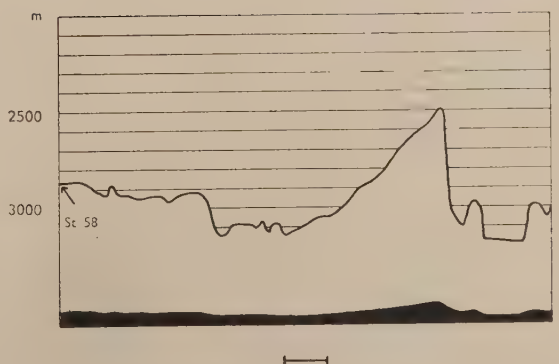

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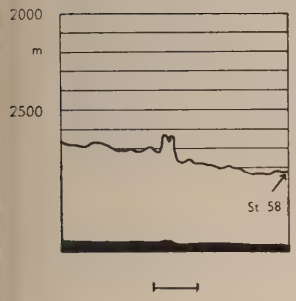


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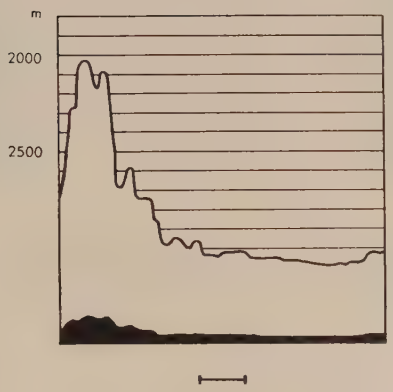


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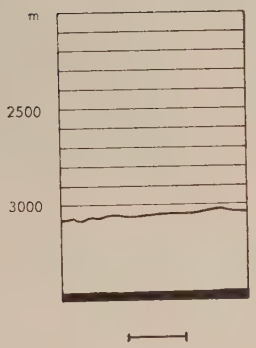
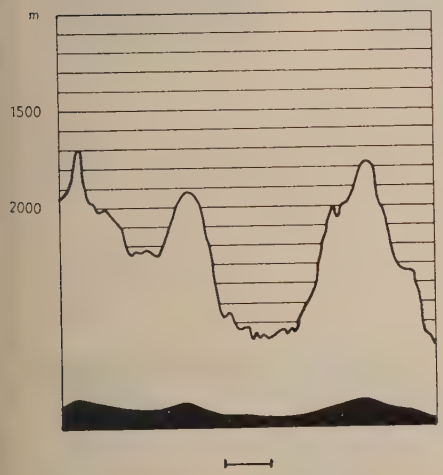
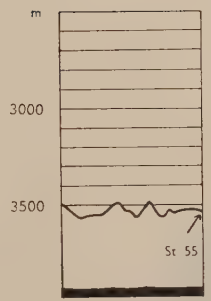


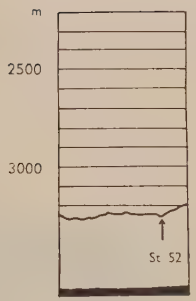

5- 20




5–21

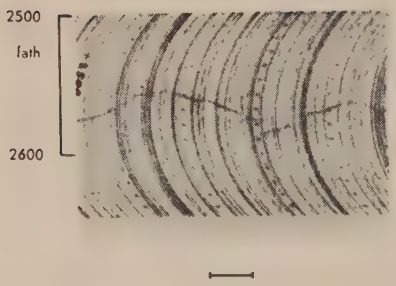



5–22

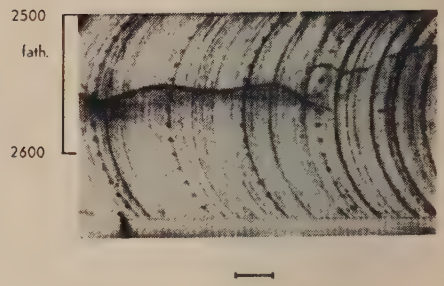


PROFILE 6.

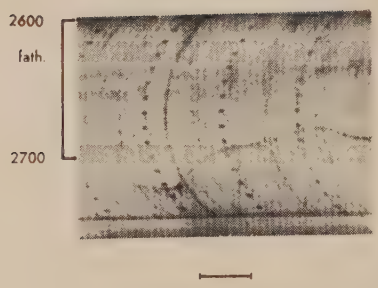
6 – A



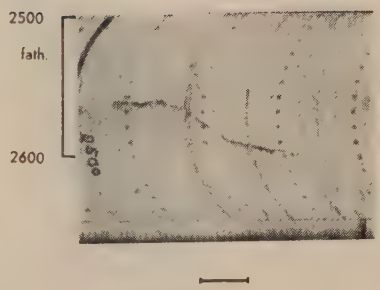

6 – B



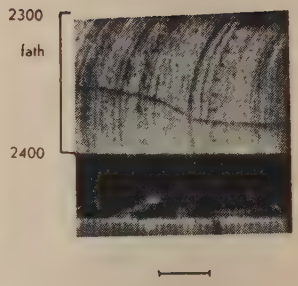

6 – C



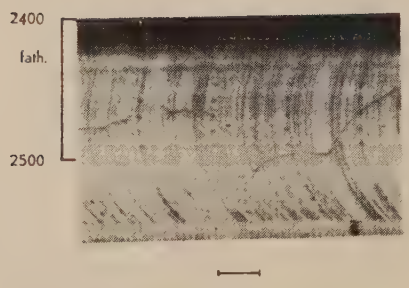

6 – D



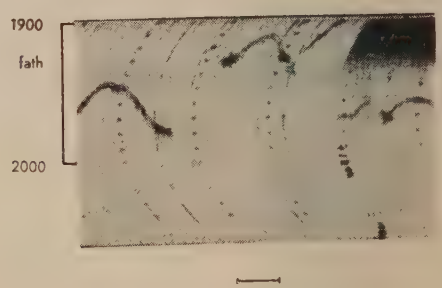

6 – E




6 – F




6 – G



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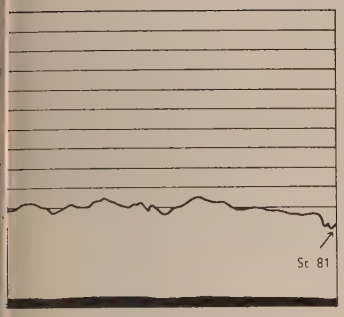
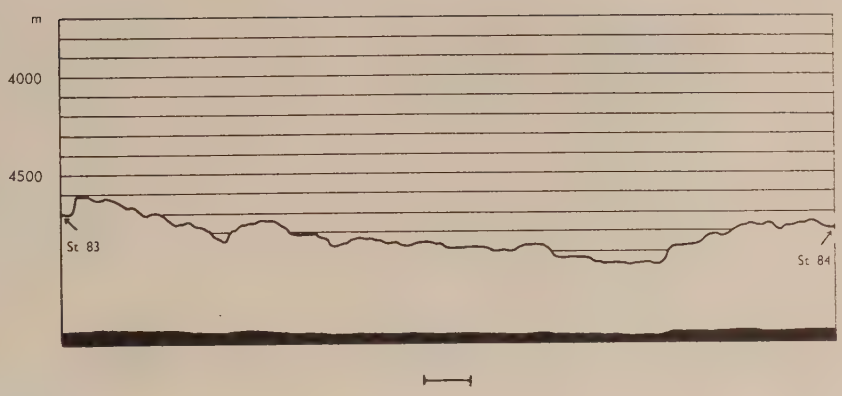



6–2

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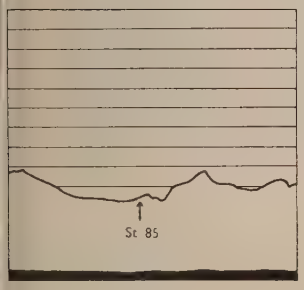


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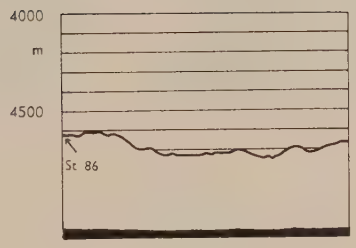
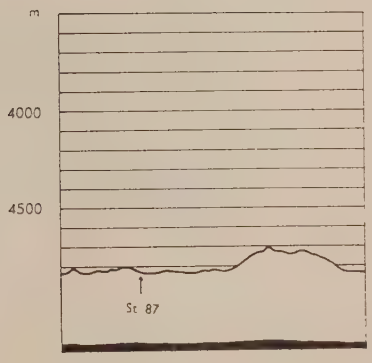
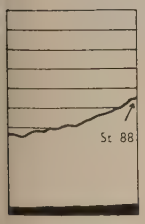


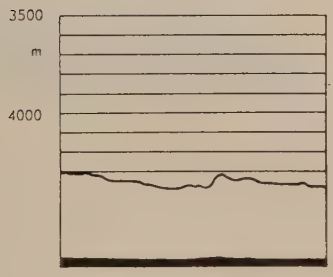

6–5



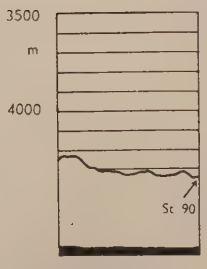

6–6



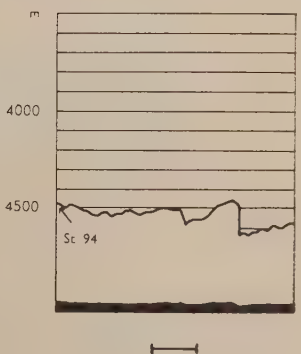

6–7



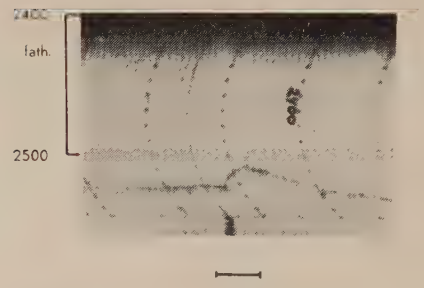

6–8



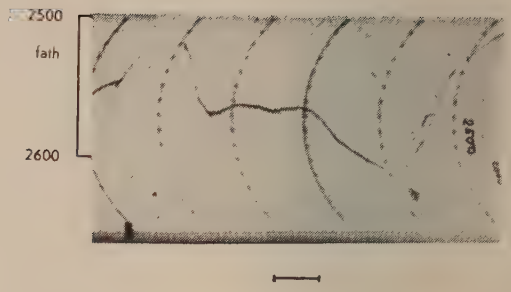

6–9



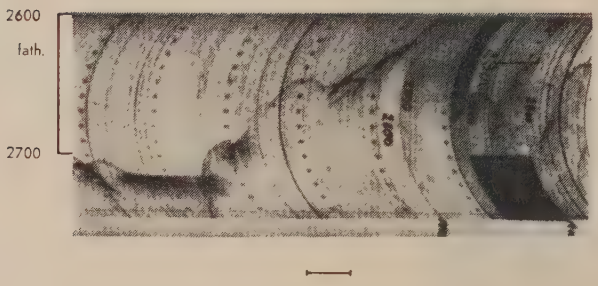
6 – H



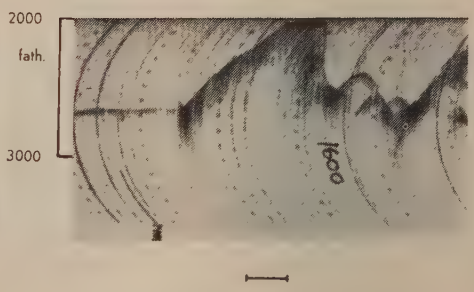

6 – I



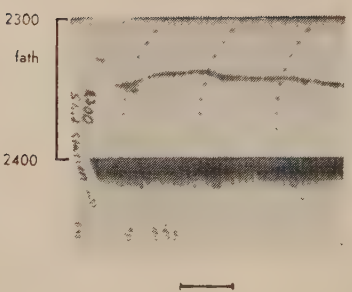

6 – K



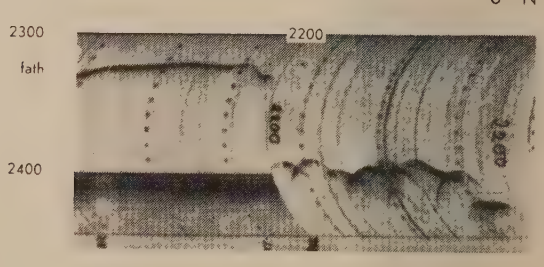

6 – L



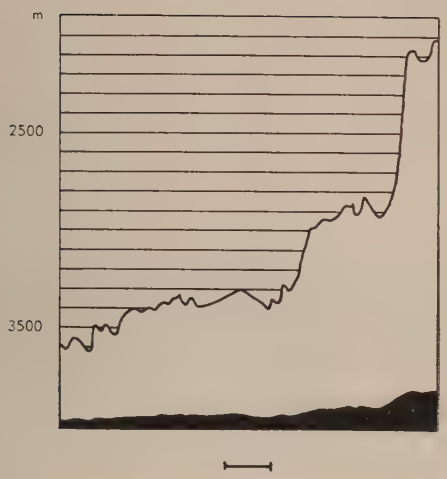

6 – M



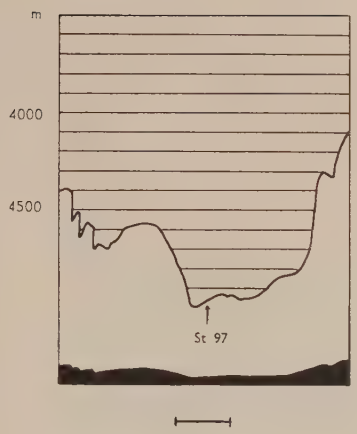

6 – N



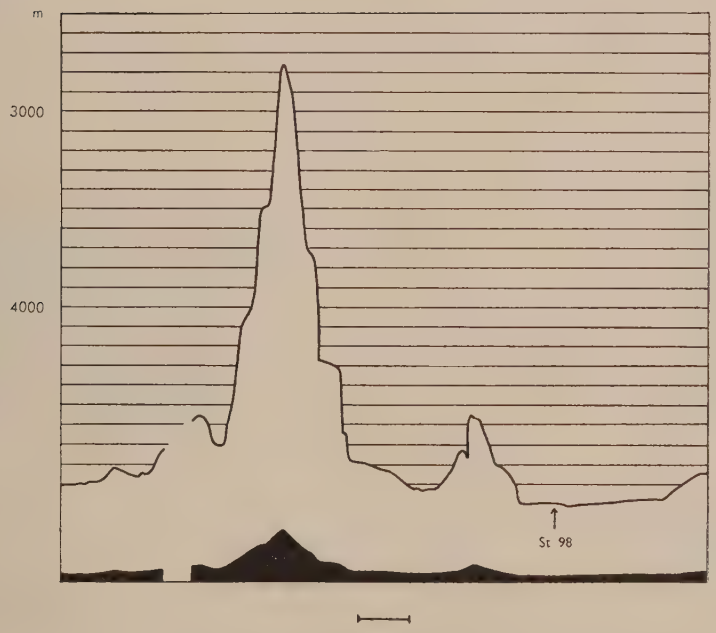
6–10



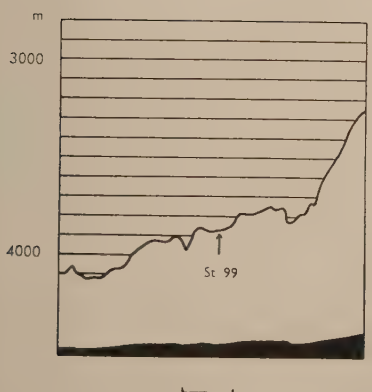

6–11



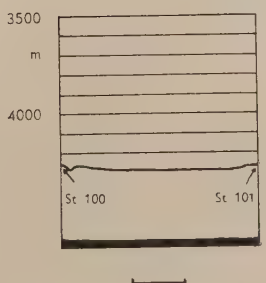

6–12




6–13

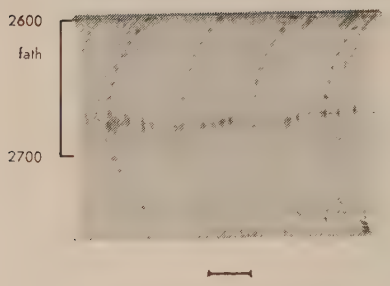



6–14

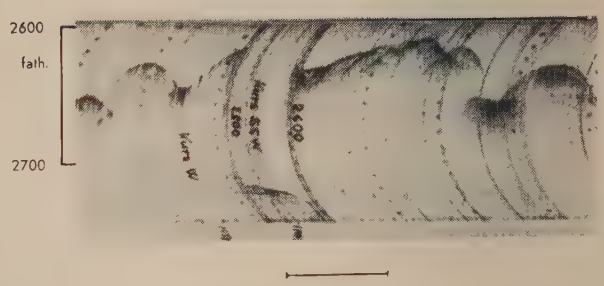


PROFILE 7.

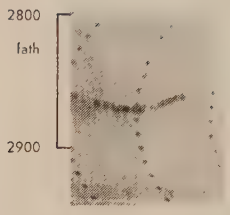
7 – A



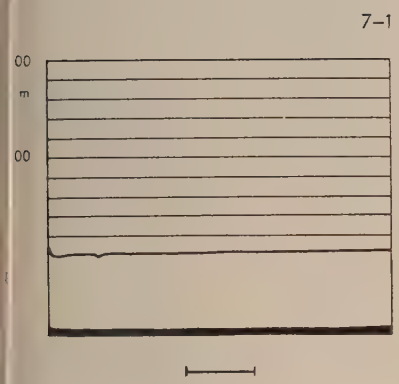

7 – B

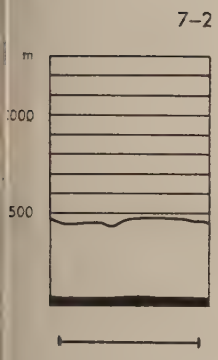


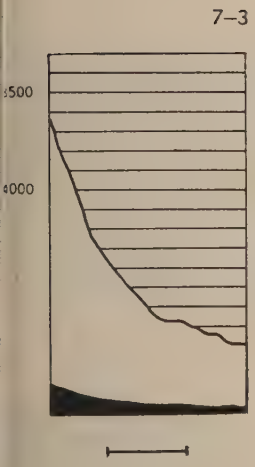

7 – C

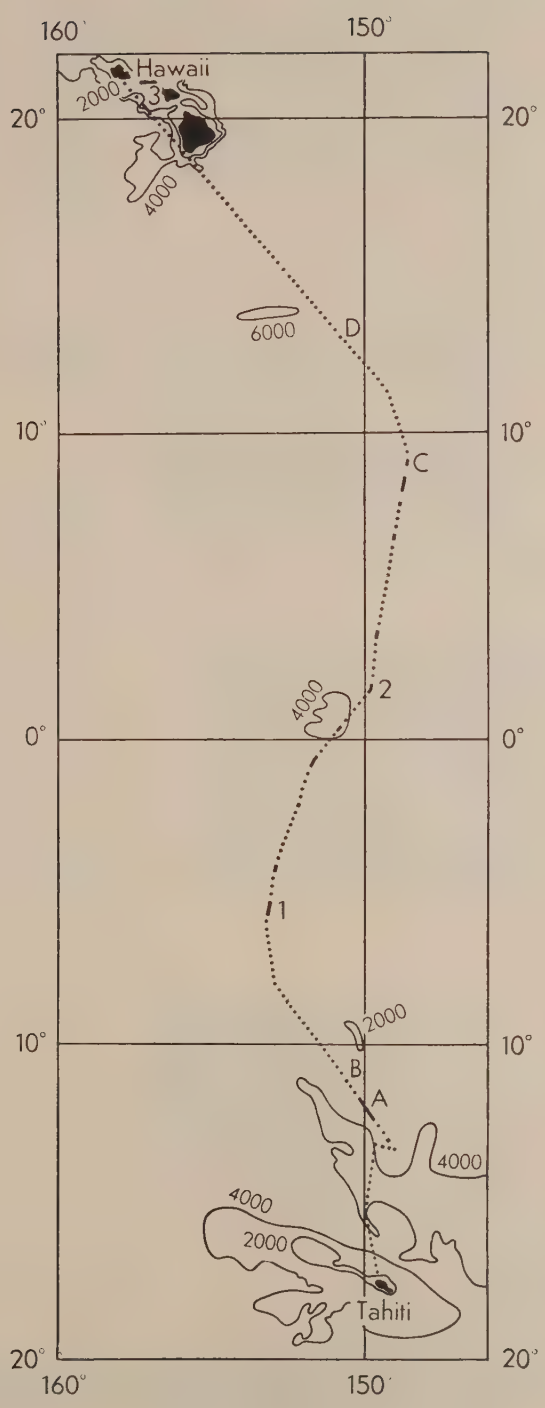



7 – D


7–1


7–2


7–3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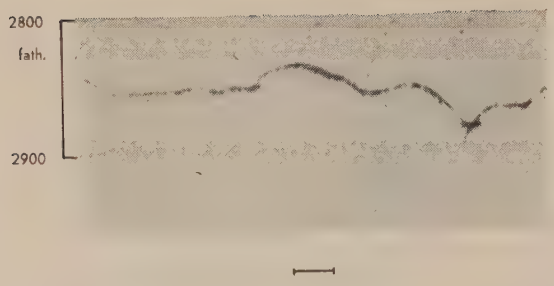
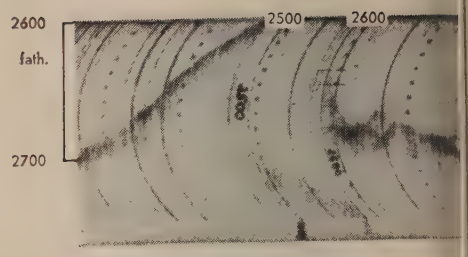
150°
Hawaii
2000
4000
6000
D
C
2
4000
1
2000
B
A
4000
4000
2000
Tahiti
20°
10°
0°

PROFILE 8.

8,–A




8-

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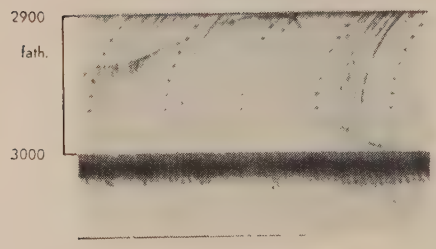
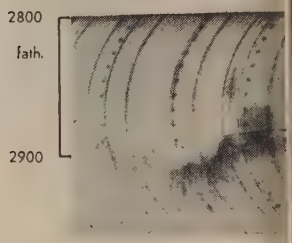
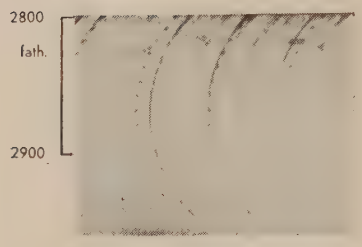


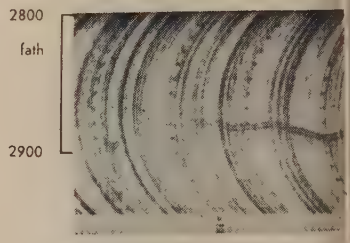

8-



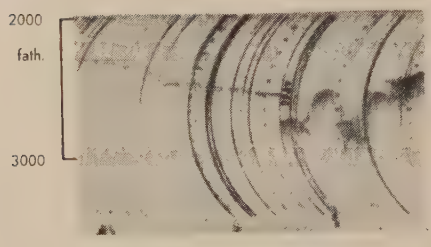

8–E



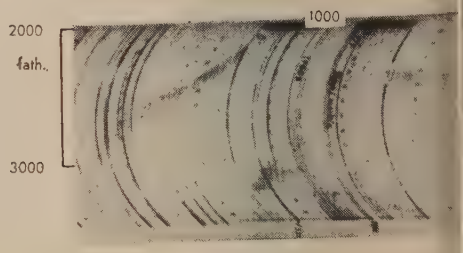

8-



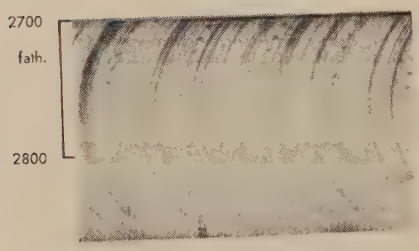

8–G



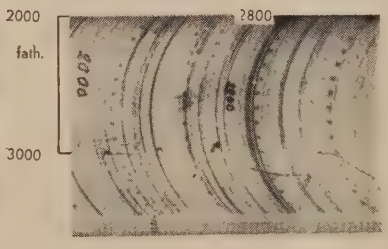

8-



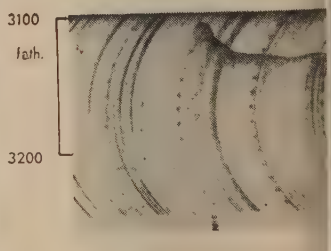

8–I



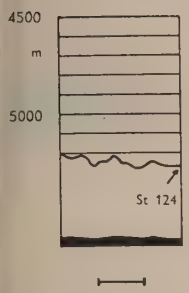

8–K



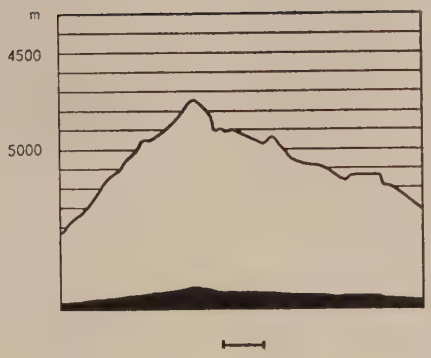

8-



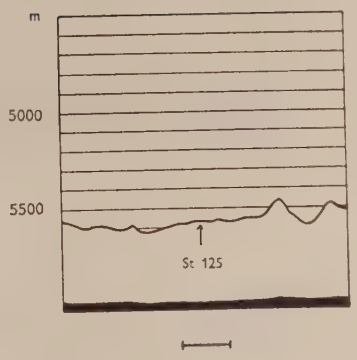
8–1



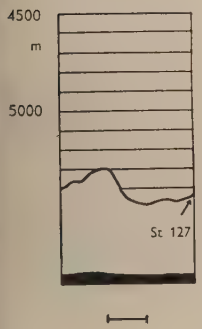

8–2



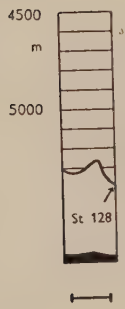

8–3



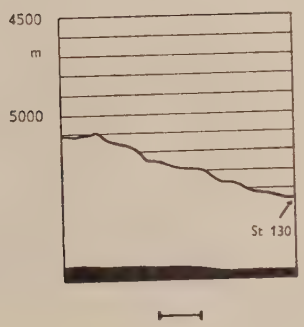

8–4



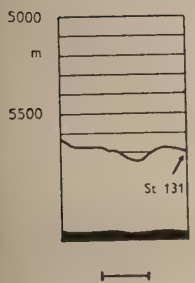

8–5



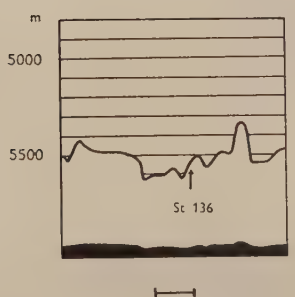

8–6



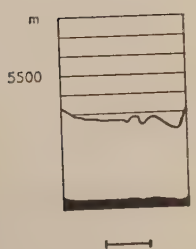

8–7




8–8

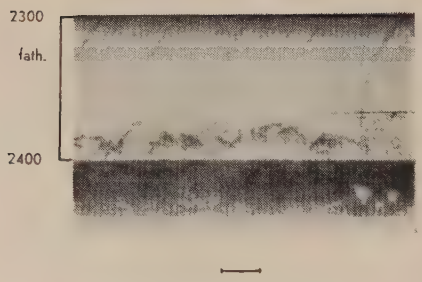



8–9

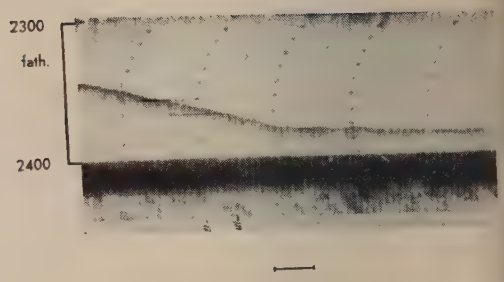


PROFILE 9.

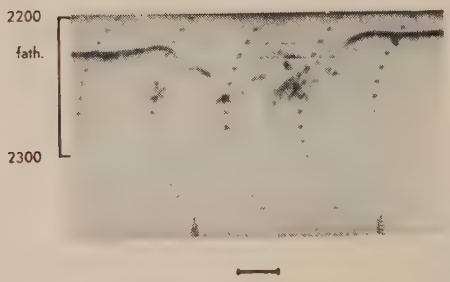
9 – A



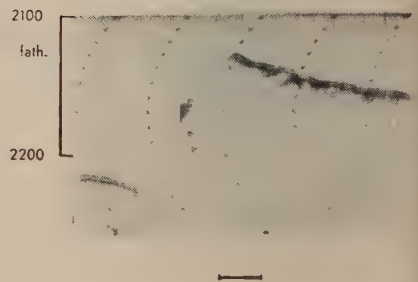

9 – B



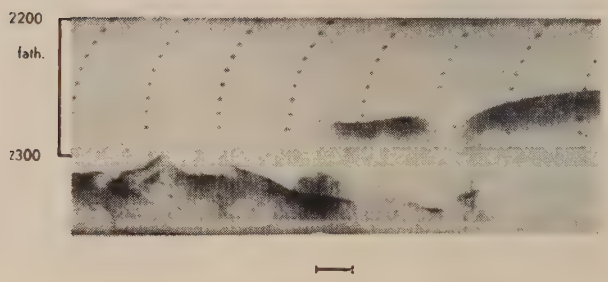

9 – C



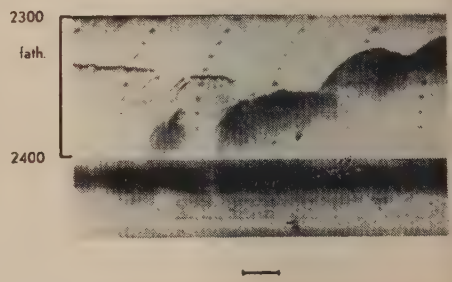

9 – D



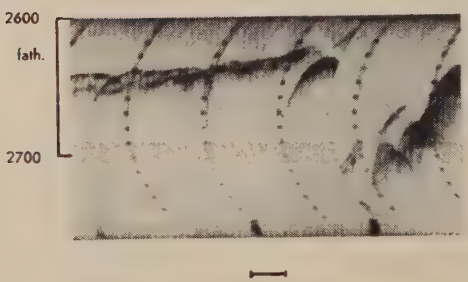

9 – E



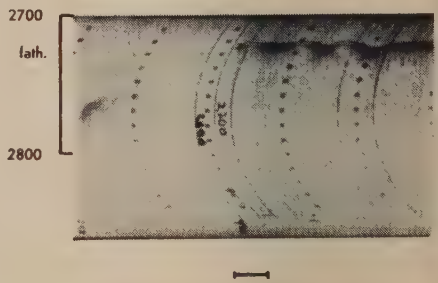

9 – F



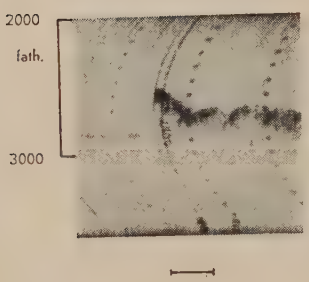

9 – G



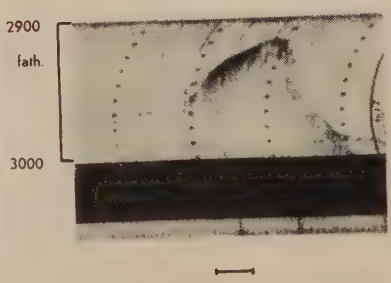

9 – H



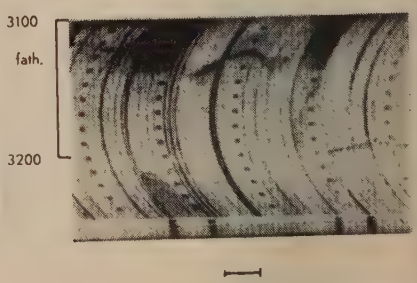

9 – I



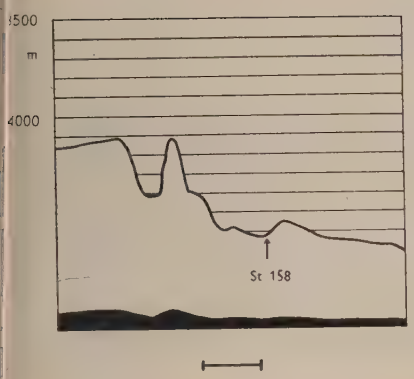

9 – K



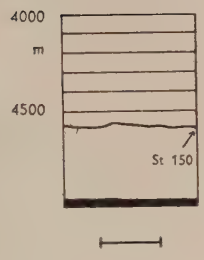

9 – L



9–1




9–2

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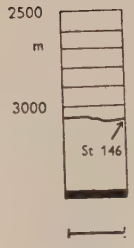
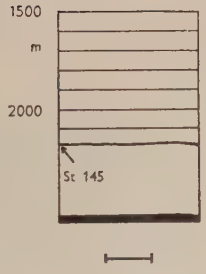
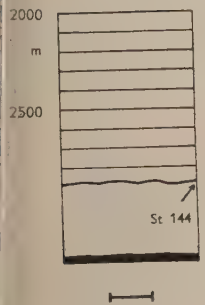


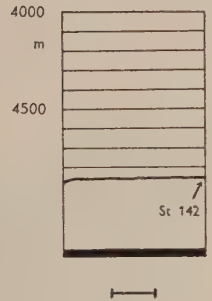

9–4




9–5




9–6

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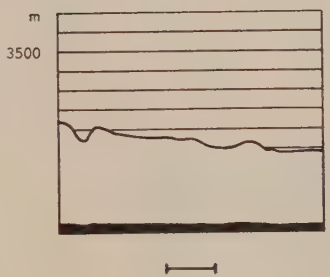
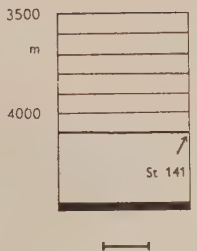
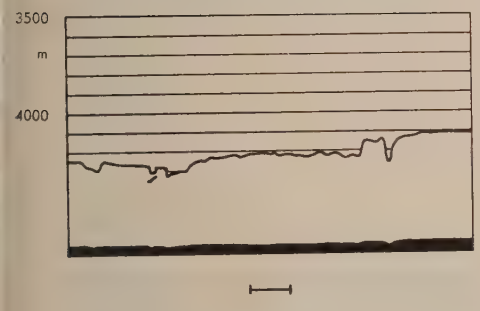


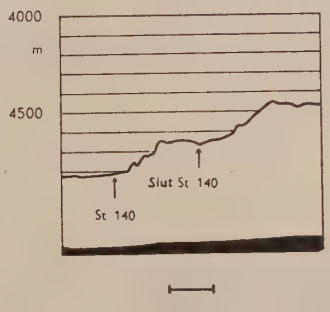

9–8



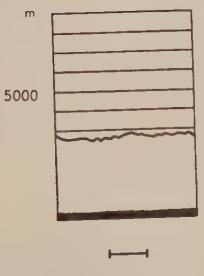

9–9



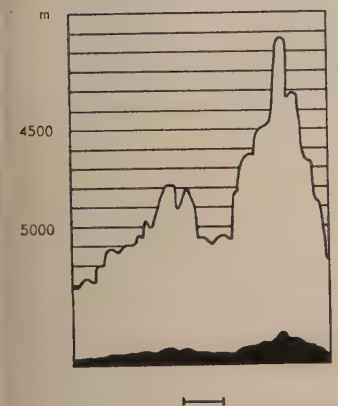

9–10



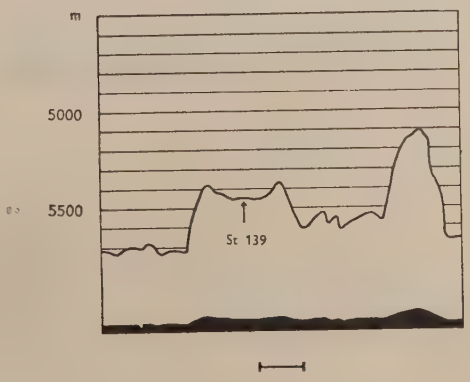

9–11




9–12

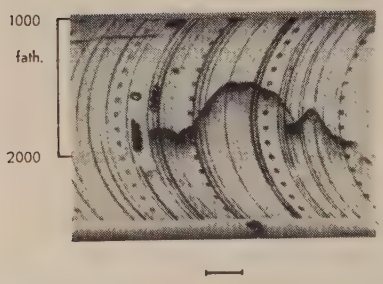



9–13

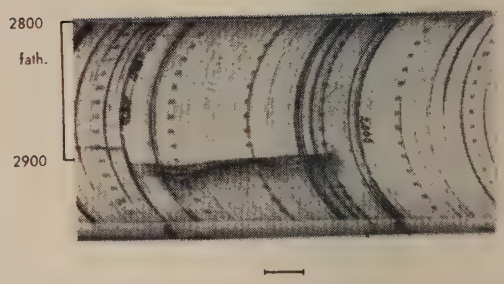


PROFILE 11.

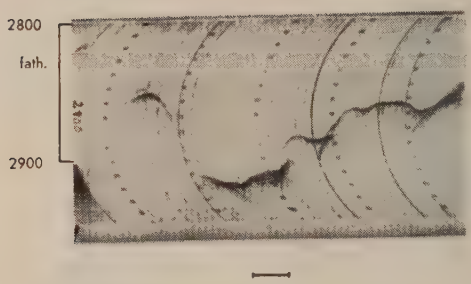
11 – A



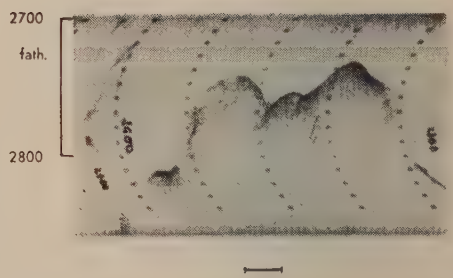

11 – B



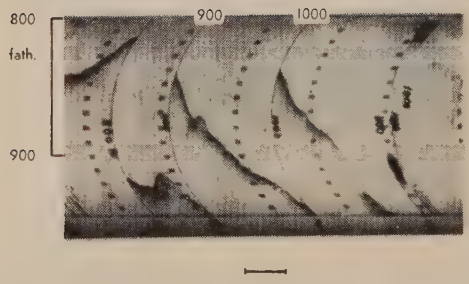

11 – C



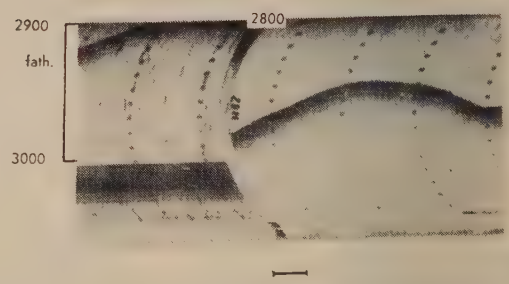

11 – D

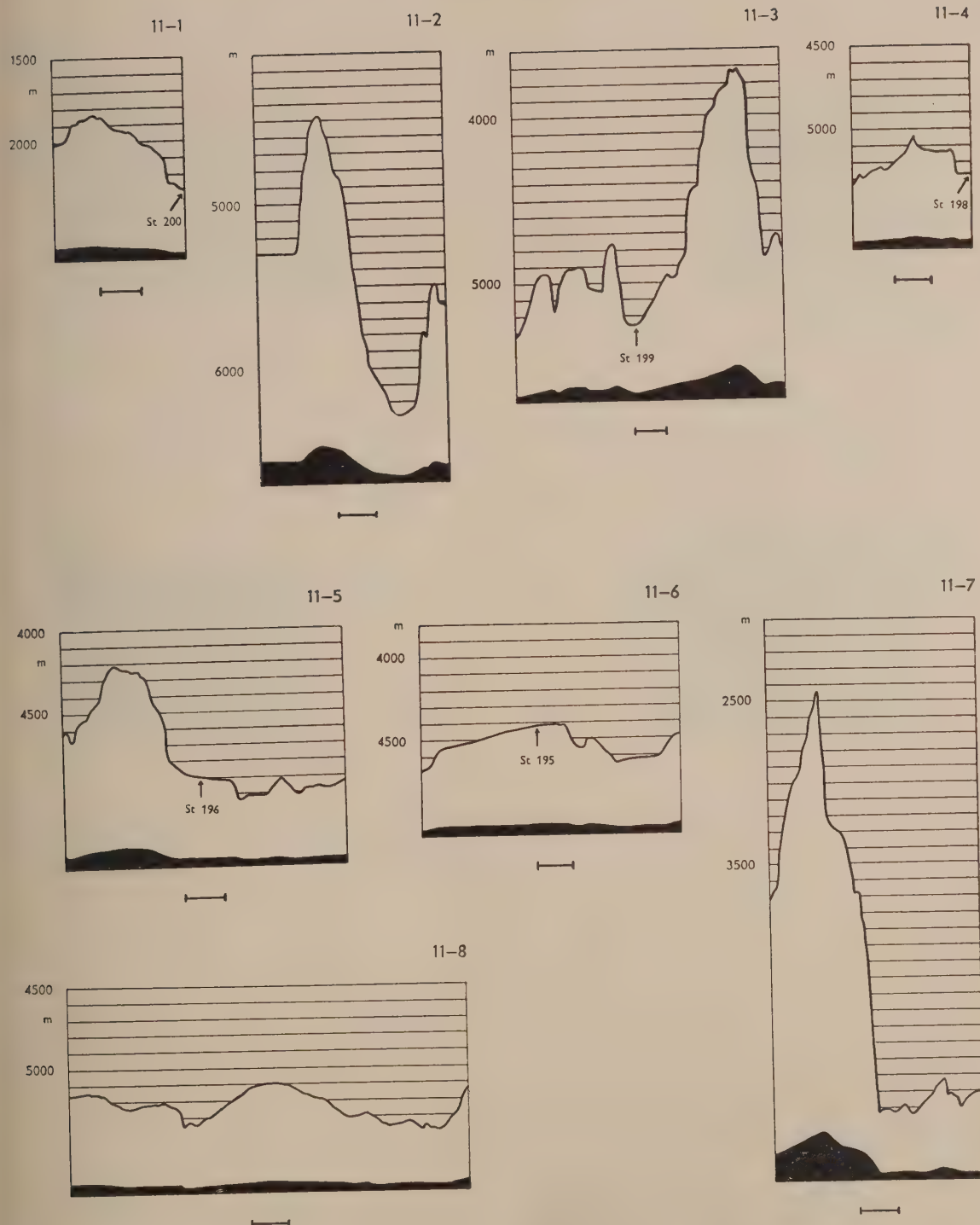



11 – E




11 – F

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St 199
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m
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St 198
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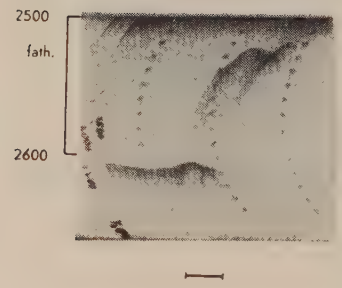
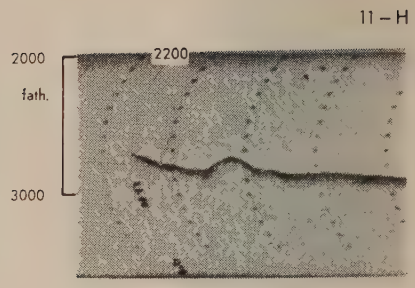
m
4500
St 196
11–6
m
4000
4500
St 195
11–7
m
2500
3500
11–8
4500
m
5000

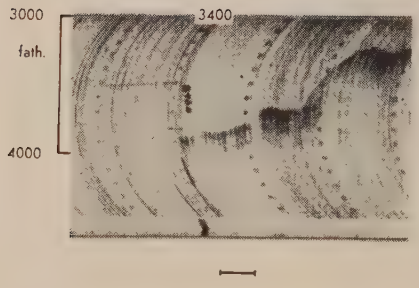
11 – G



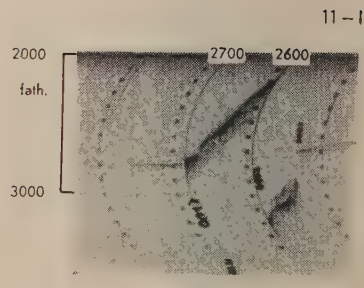

11 – H

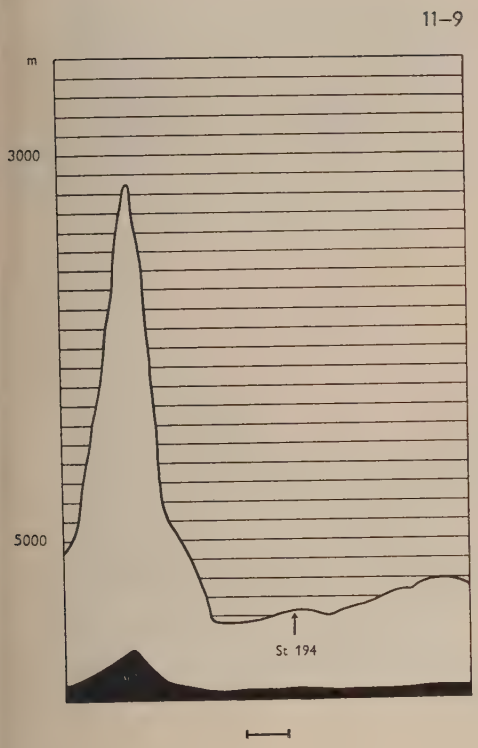


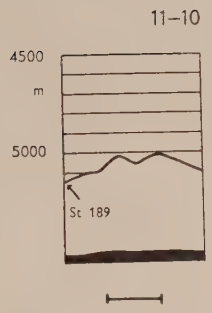

11 – K

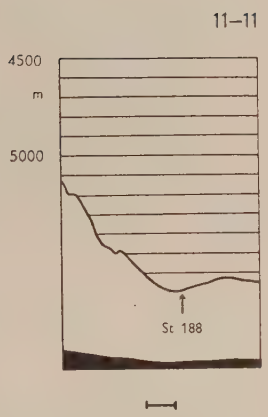


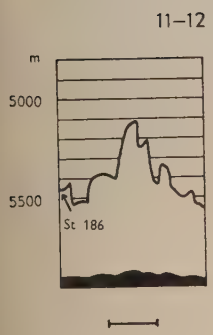

11 – I

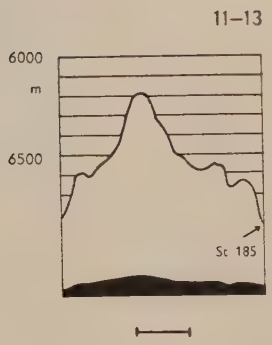


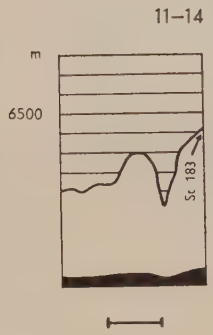

11–9
m
3000
5000
St 194

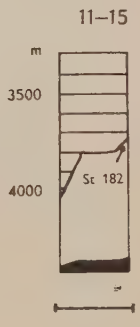

11–10
4500
m
5000
St 189


11–11
4500
m
5000
St 188


11–12
m
5000
5500
St 186

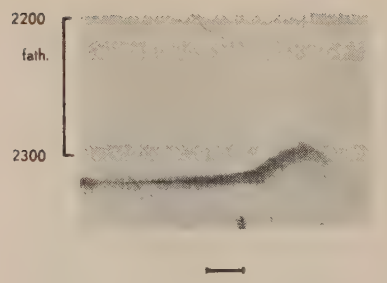

11–13
6000
m
6500
St 185


11–14
m
6500
St 183

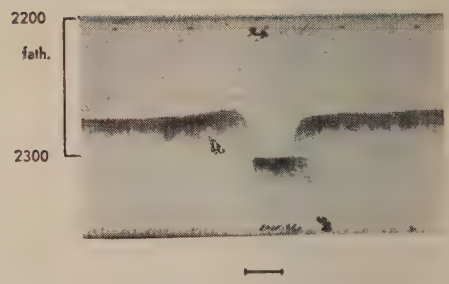

11–15
m
3500
4000
St 182

PROFILE 12.

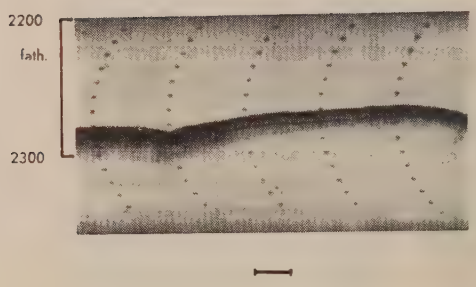
12 – A



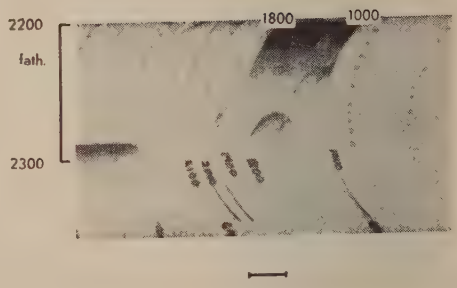

12 – B



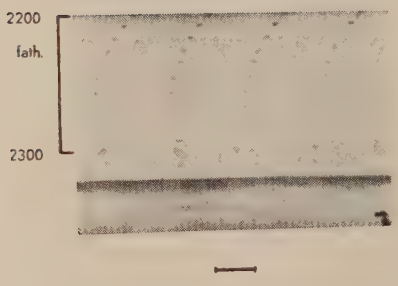

12 – C



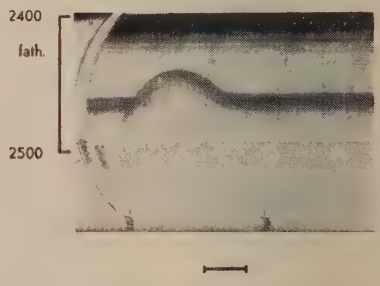

12 – D



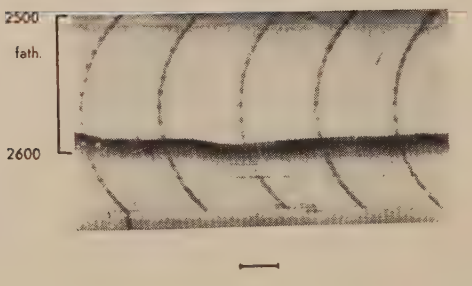

12 – E



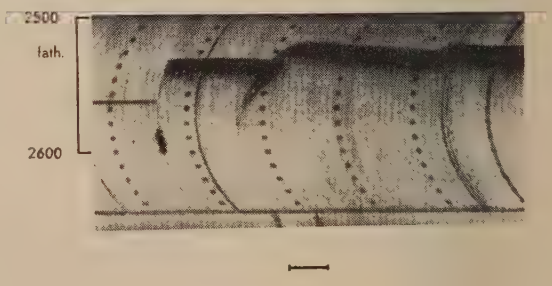

12 – F

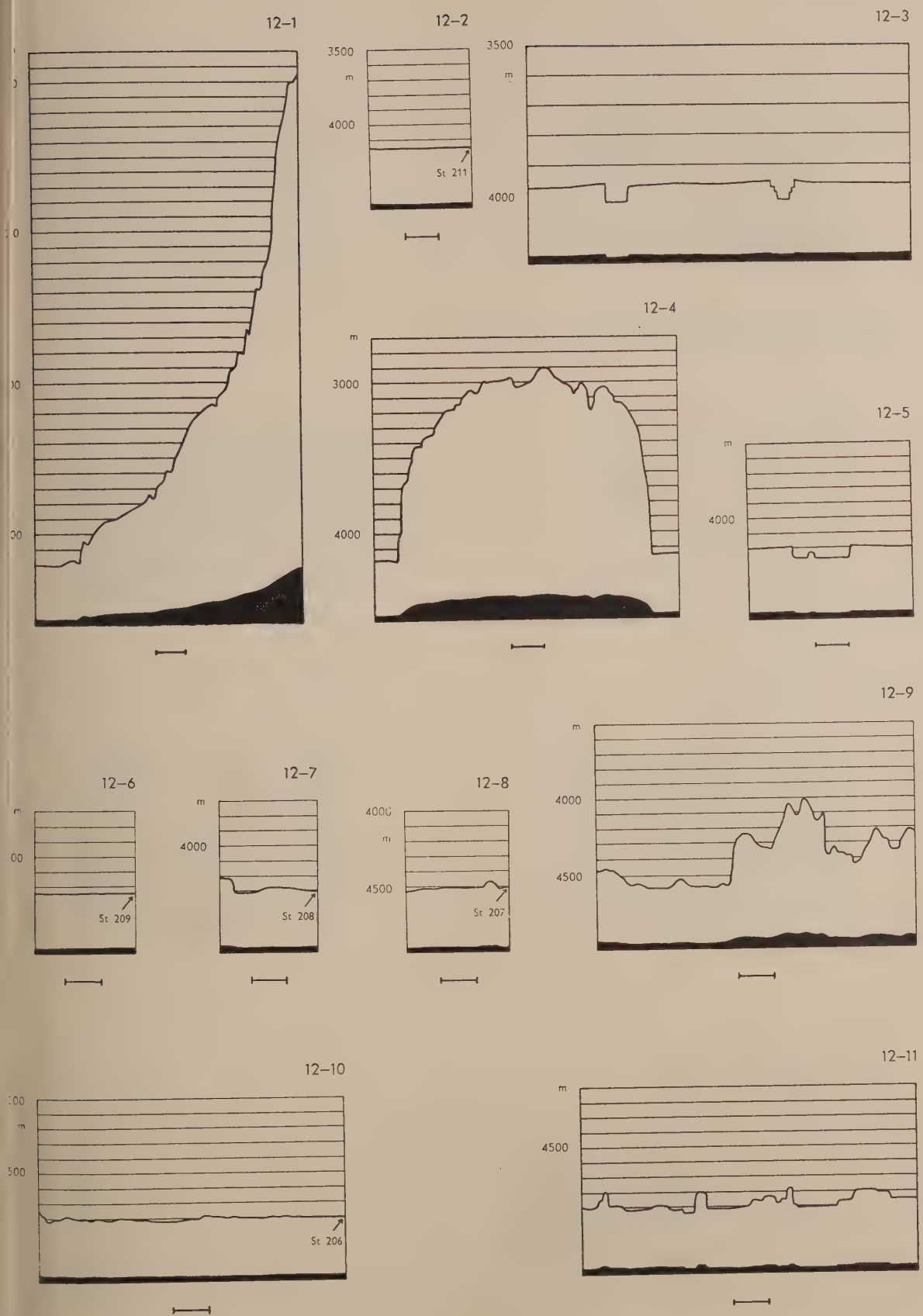



12 – G




12 – H




12–1
12–2
3500
m
4000
St 211
12–3
3500
m
4000
12–4
m
3000
4000
12–5
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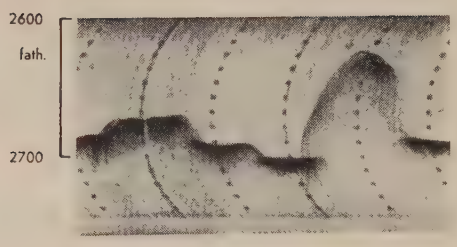
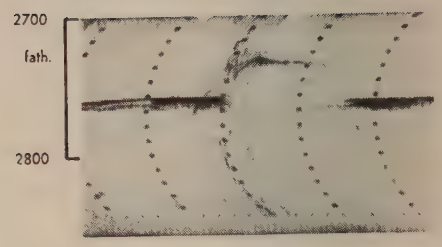
4000
12–6
m
St 209
12–7
m
4000
St 208
12–8
4000
m
4500
St 207
12–9
m
4000
4500
12–10
m
St 206
12–11
m
4500

12 – I

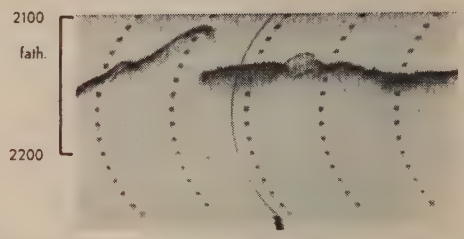



12 – K

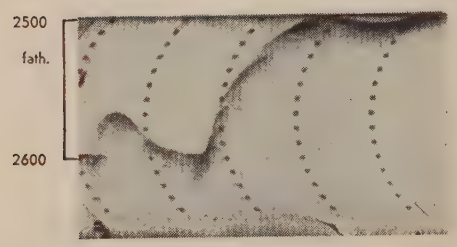



12 – L

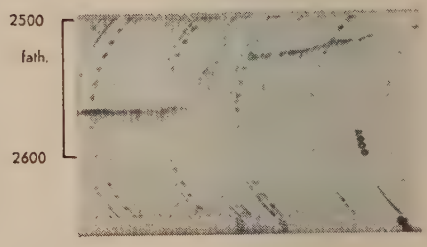
12 – M



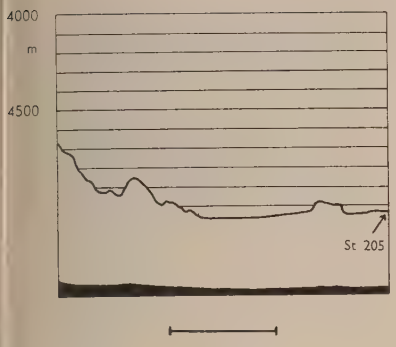

12 – N



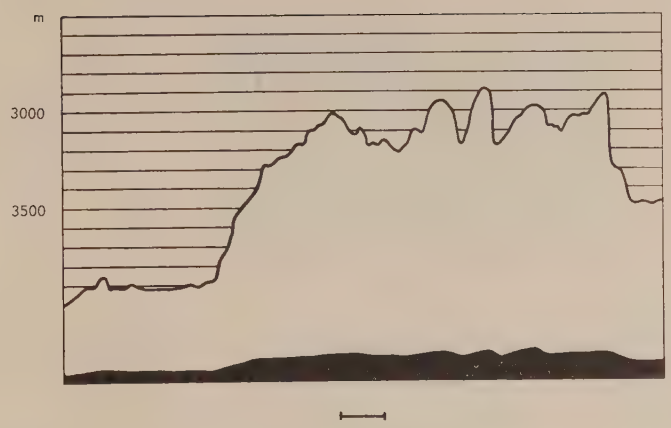

12 – O



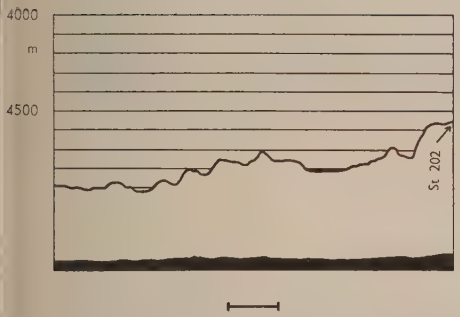
12–12



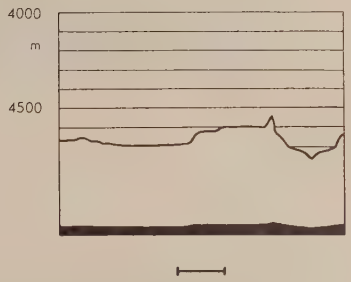

12–13



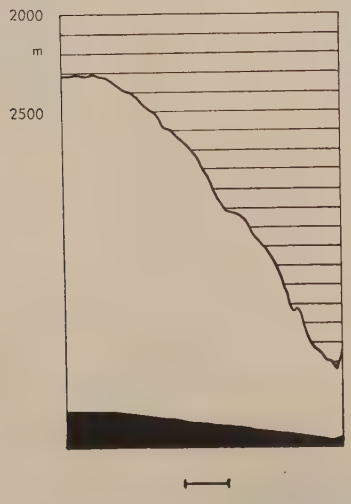

12–14




12–15

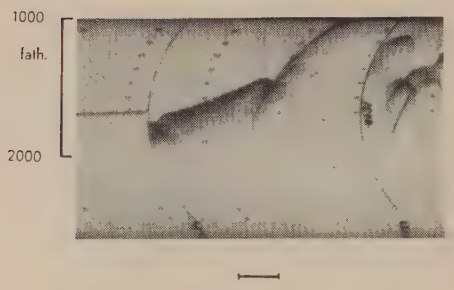



12–16

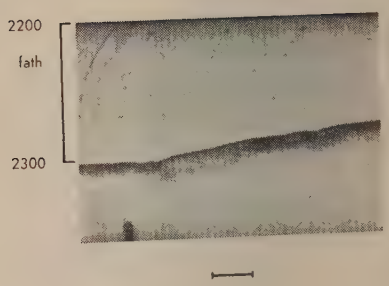


PROFILE 13.

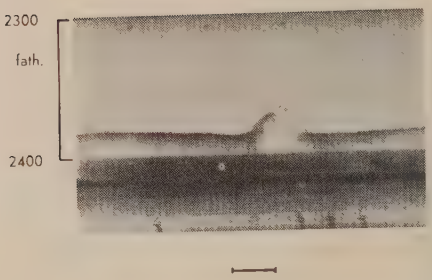
13 – A



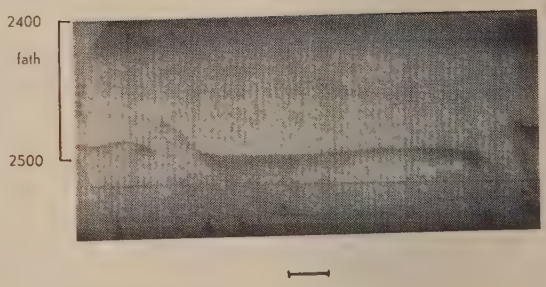

13 – B



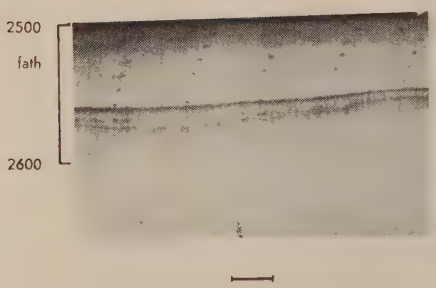

13 – C



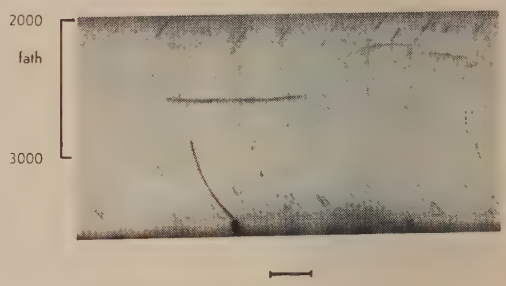

13 – D



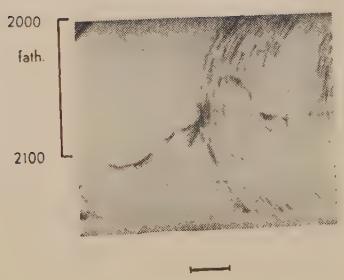

13 – E



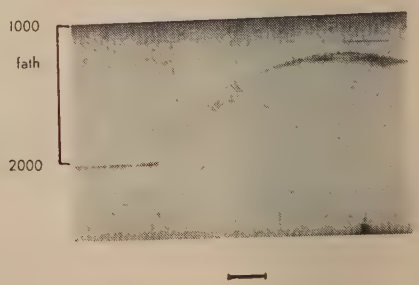

13 – F



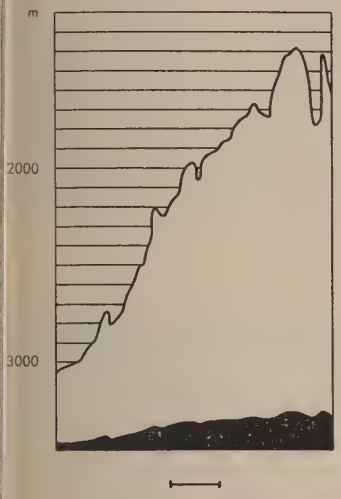

13 – G



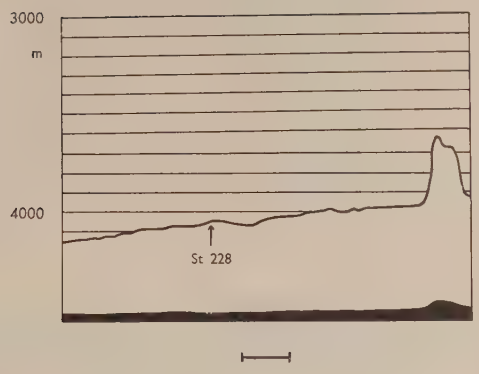

13 – H



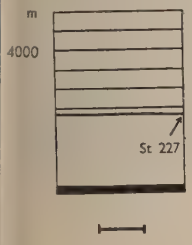
13–1



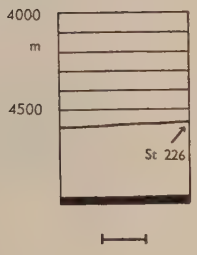

13–2



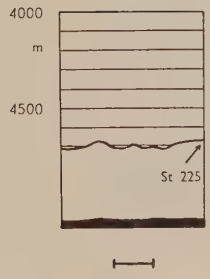

13–3



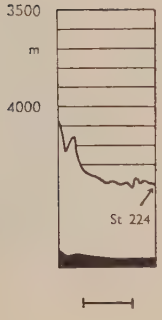

13–4



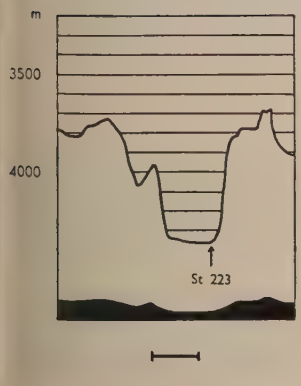

13–5



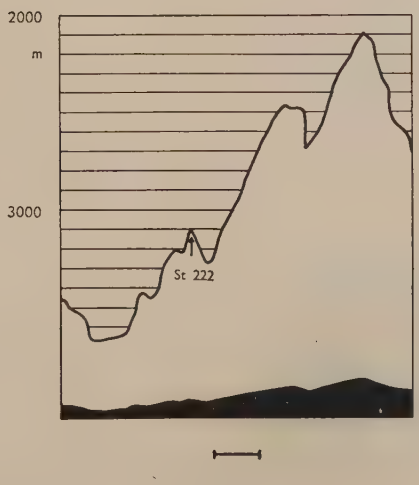

13–6



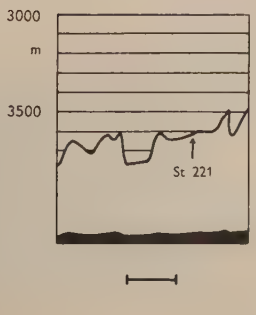

13–7



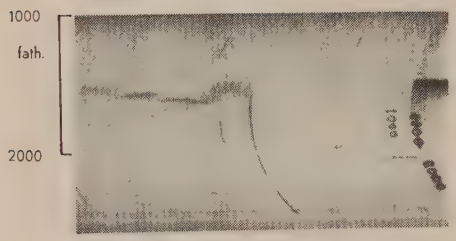

13–8



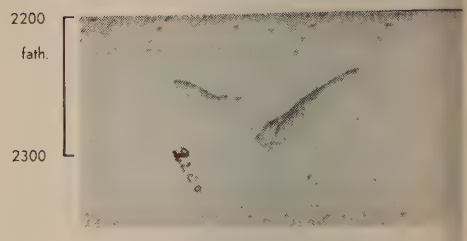

13–9



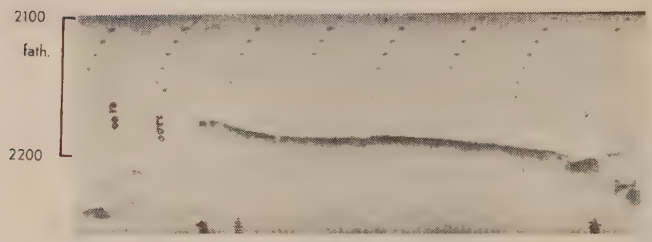
13 – I




13 – K



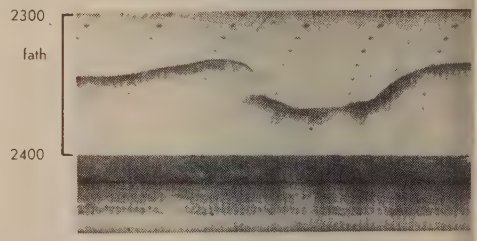

13 – L



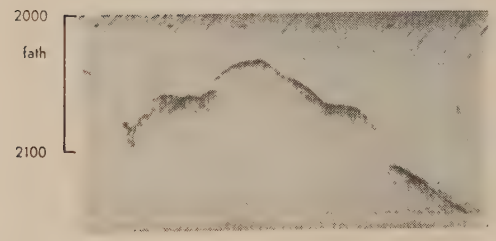

13 – M

13 – N

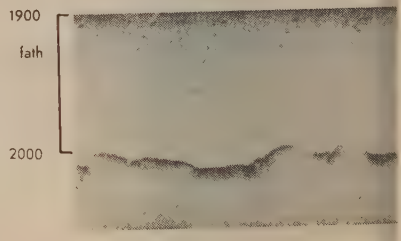
13 – O



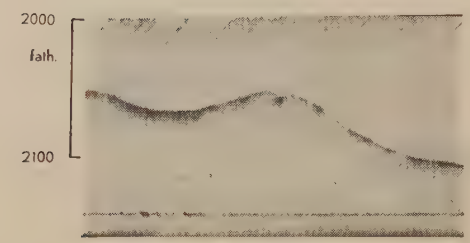

13 – P



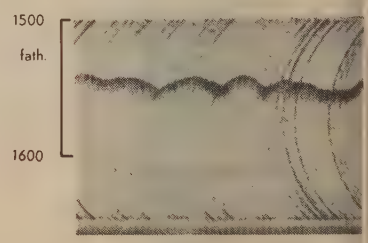

13 – Q



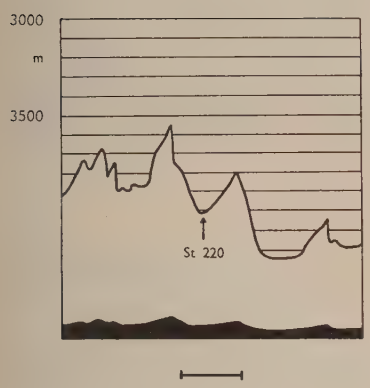

13 – R



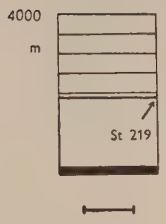

13 – S



13–10




13–11

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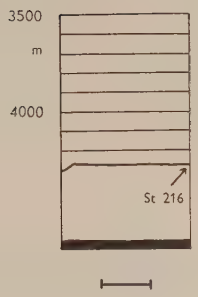


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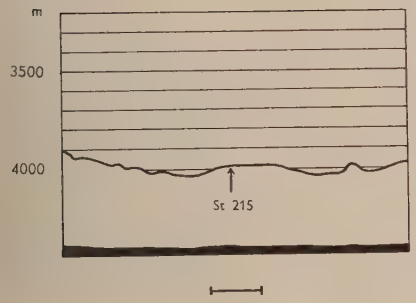
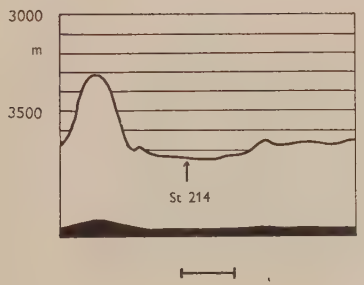



13–14

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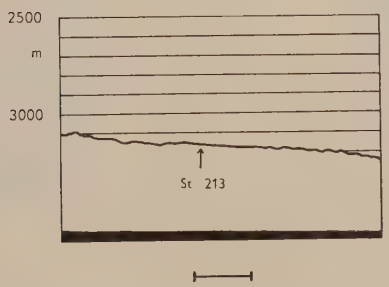
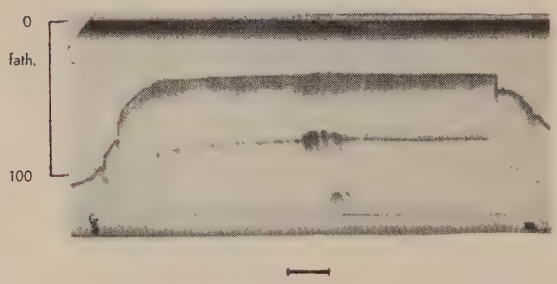
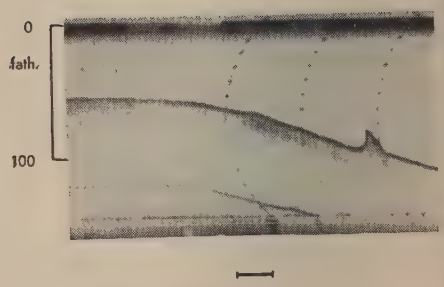


PROFILE 14.

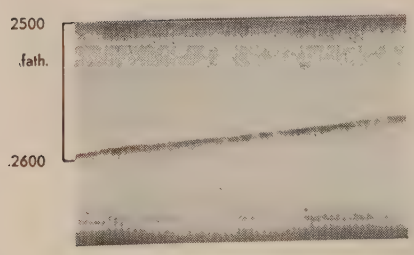
14 – A



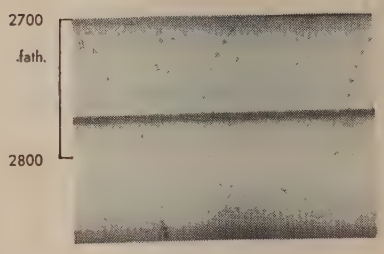

14 – B



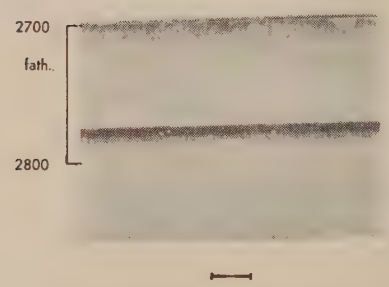

14 – C



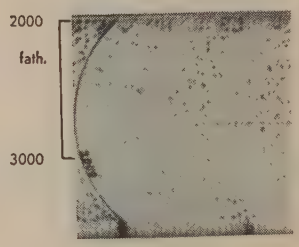

14 – D



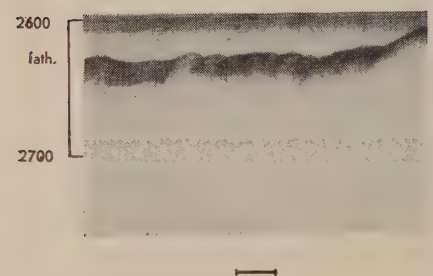

14 – E



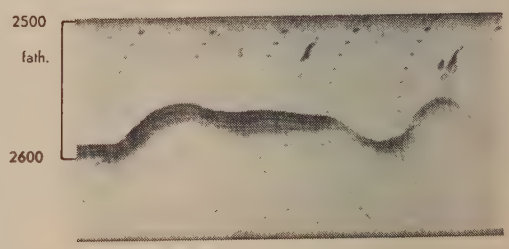

14 – F



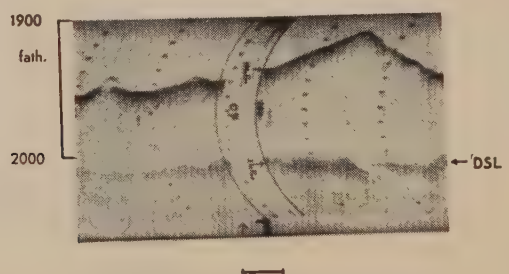

14 – G



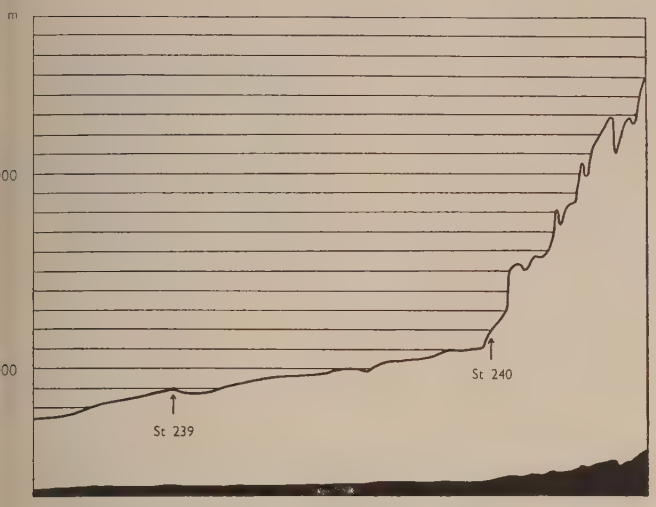

14 – H




14 – I



14–1

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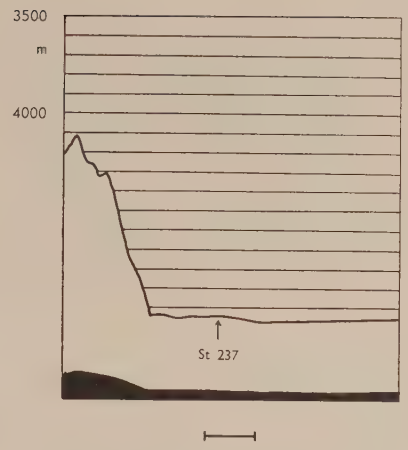


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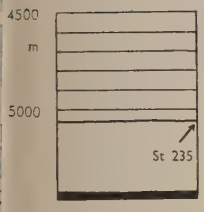


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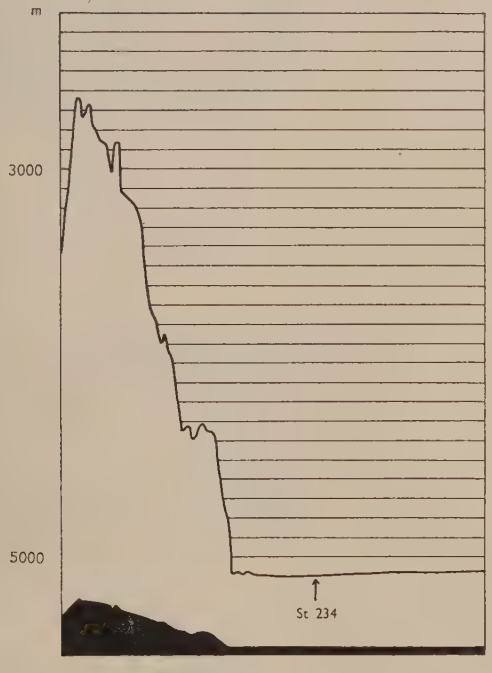
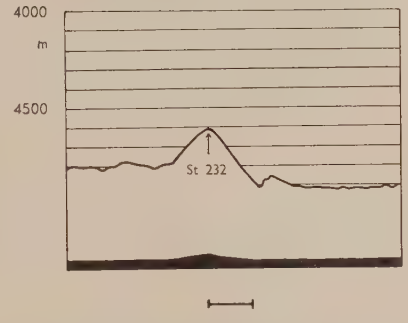



14–5

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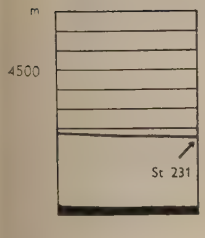


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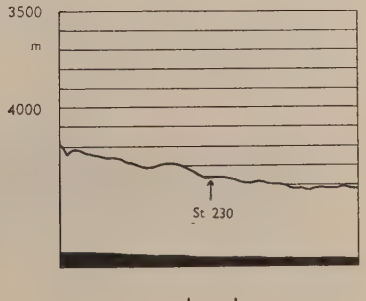
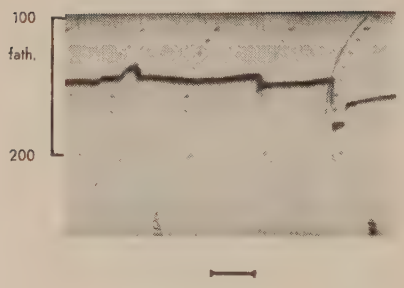
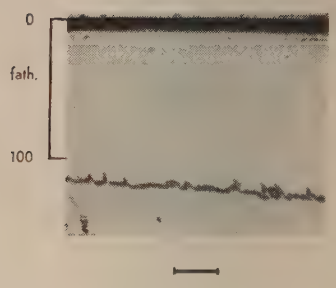


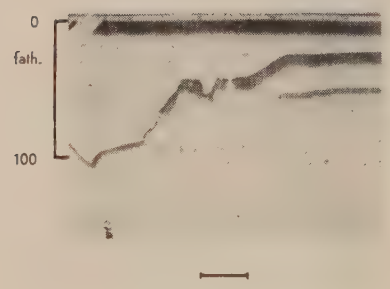
15 – A



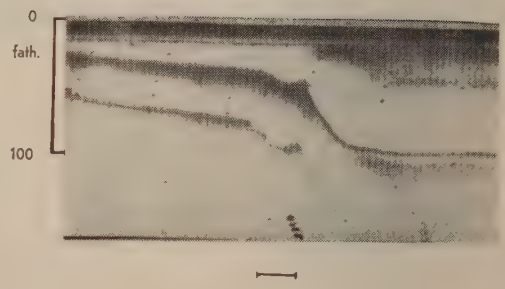

15 – B




15 C




15 – D

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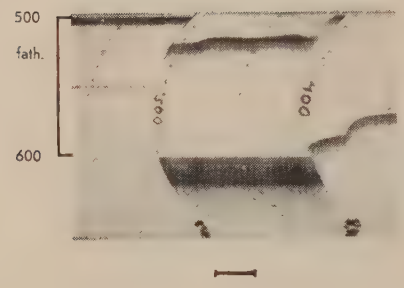


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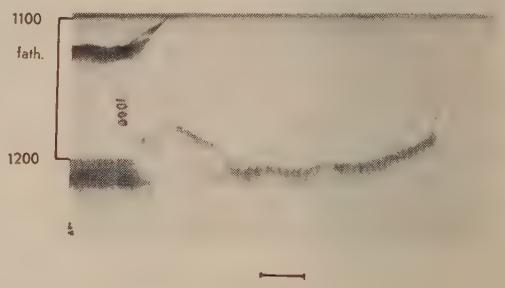
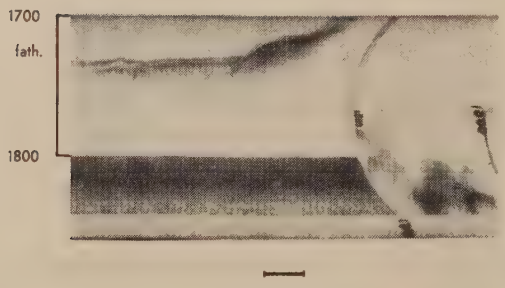
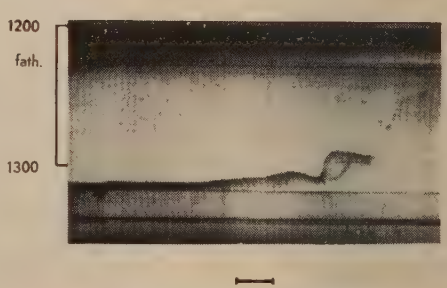
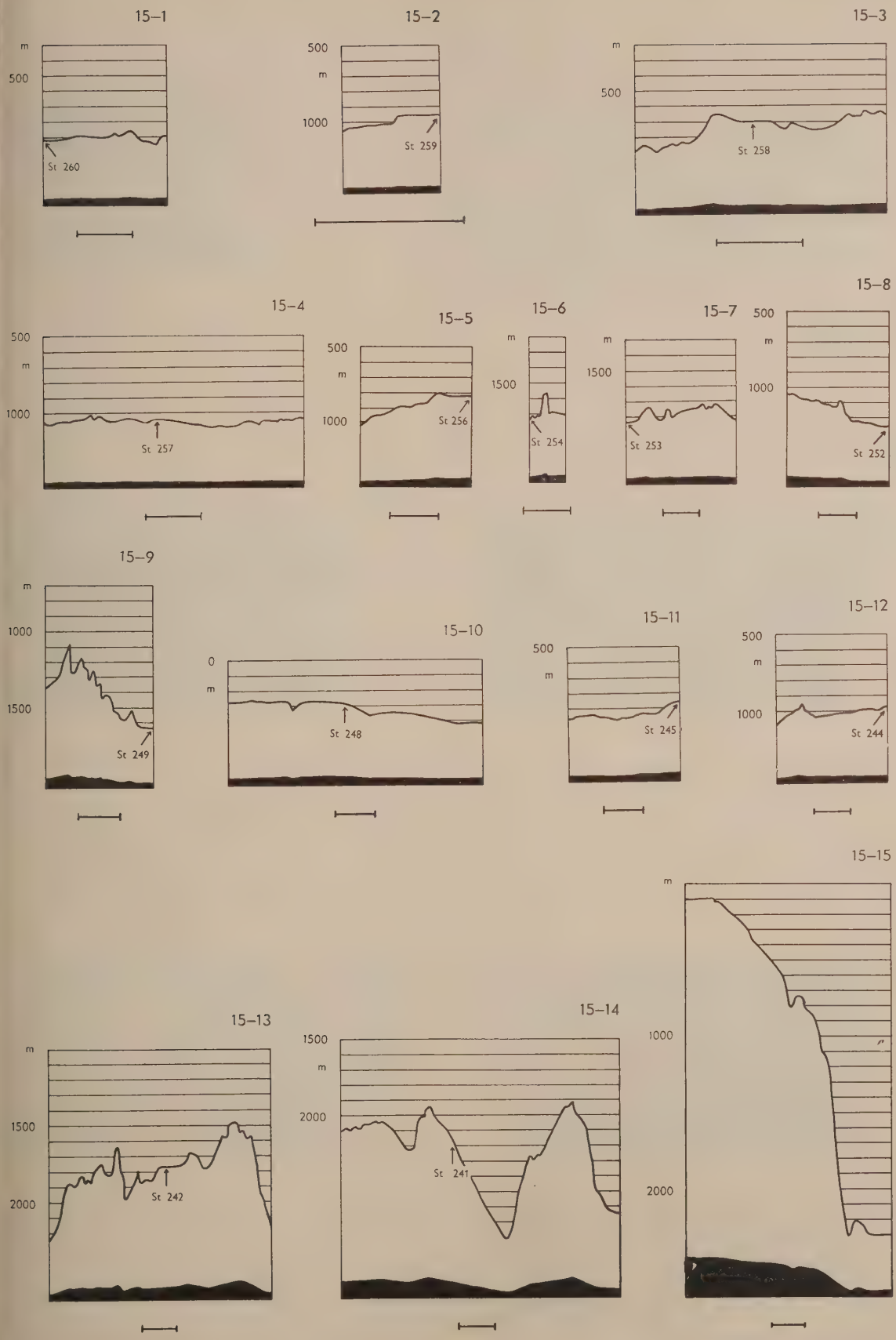



15 – G




15 – H

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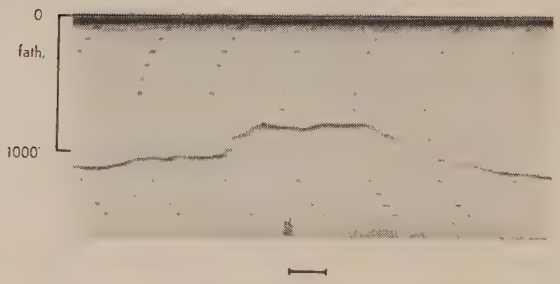
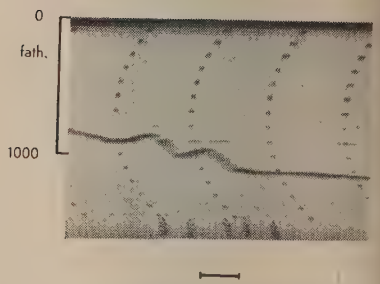
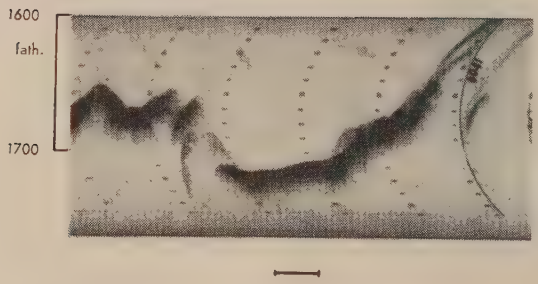
16 – A



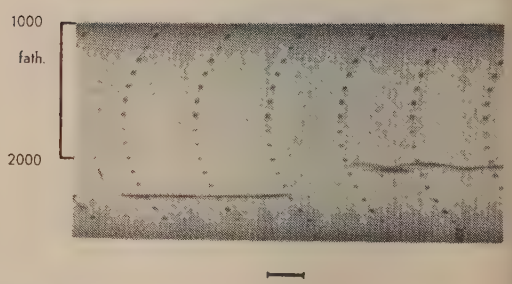

16 – B



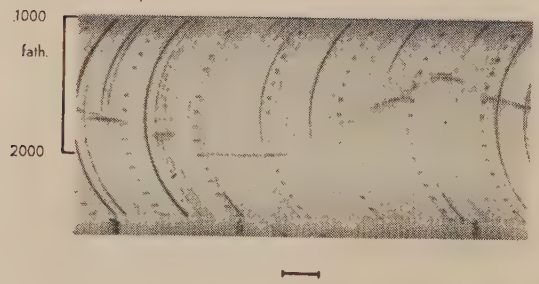

16 – C



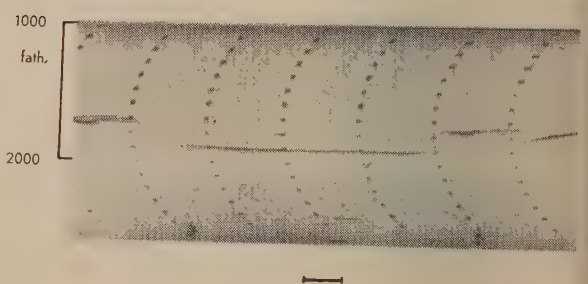

16 – D



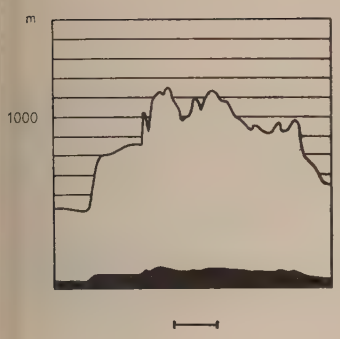

16 – E



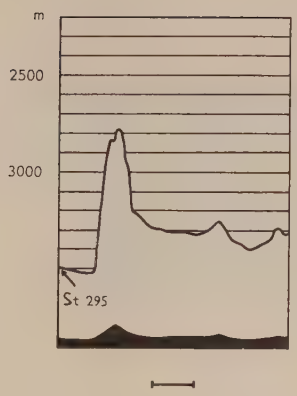

16 – F



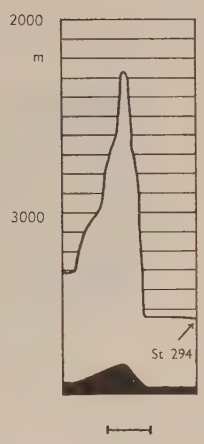
16–1



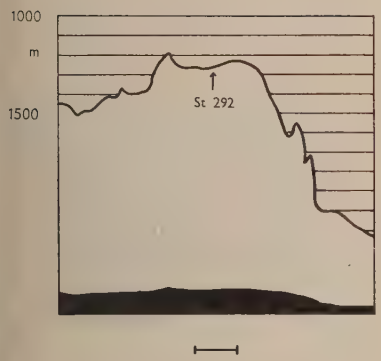

16–2




16–3




16–4

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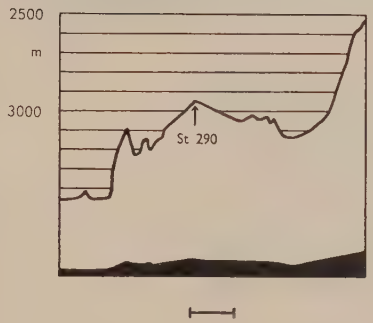


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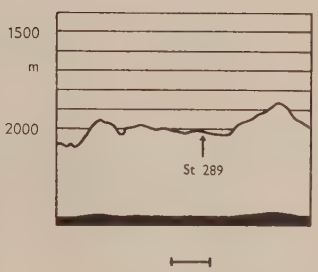


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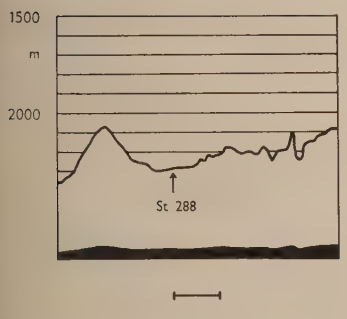
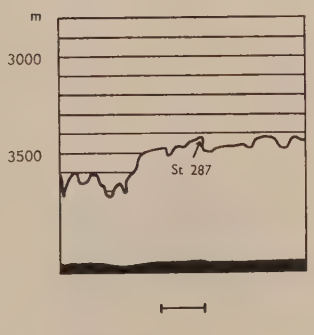
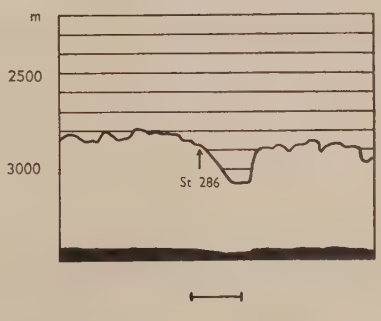


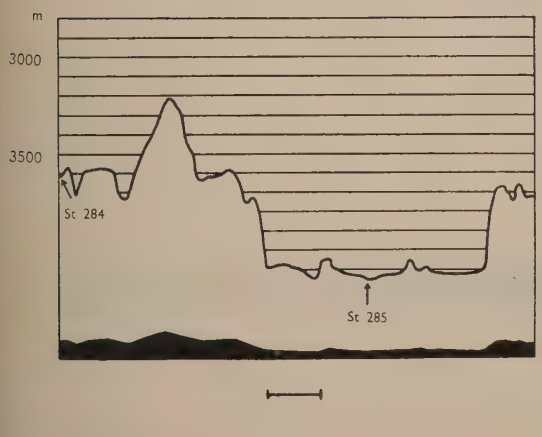

16–8




16–9




16–10

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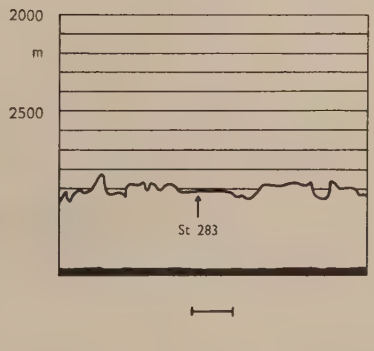
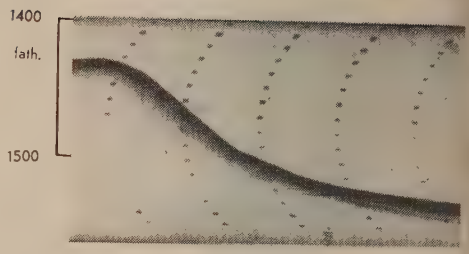
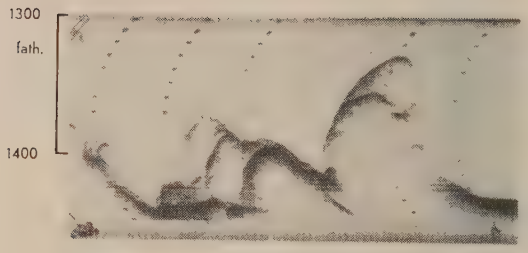


16 – G

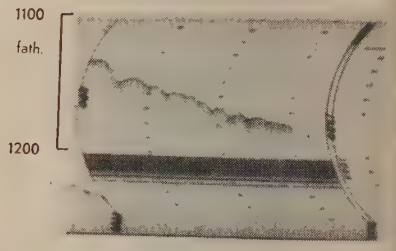
16 – H



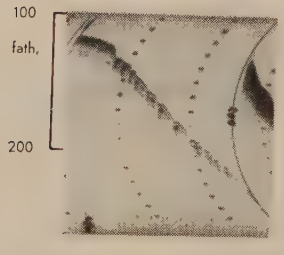

16 – I



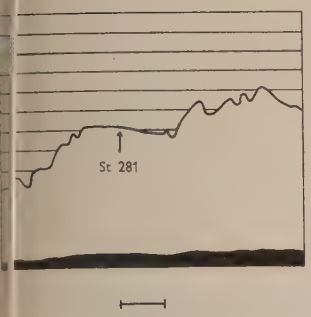

16 – K



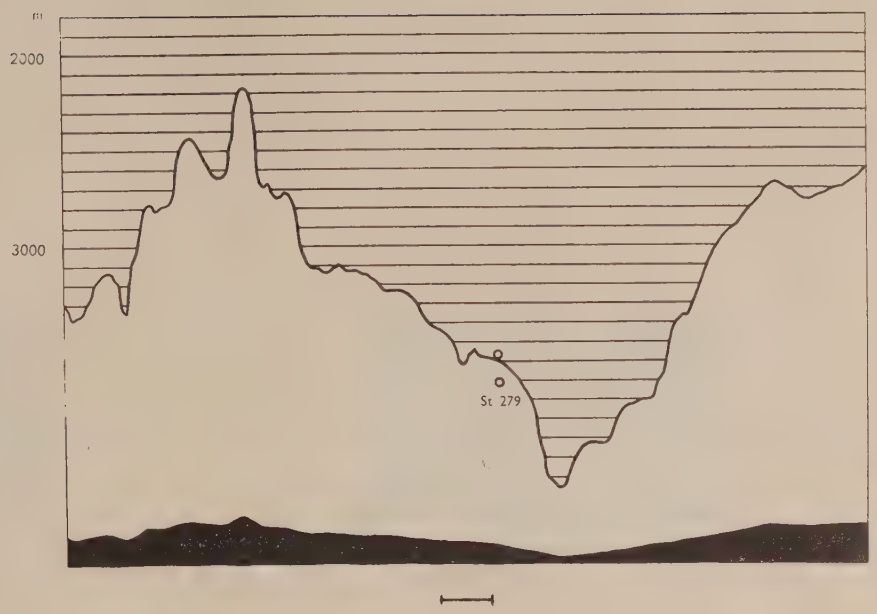

16 – L



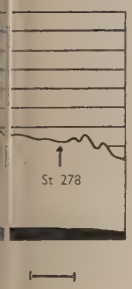
16–12



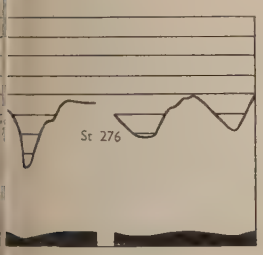

16–13



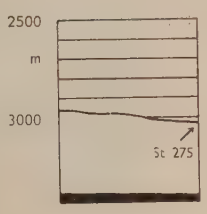

16–14



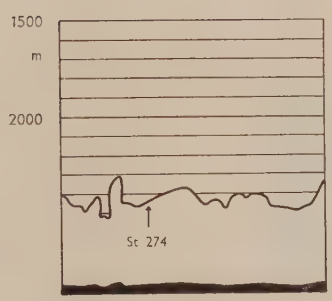

16–15



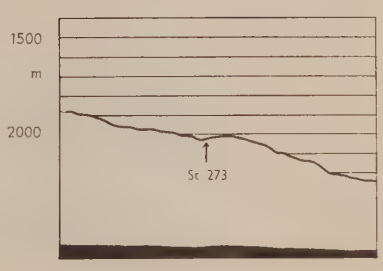

16–16



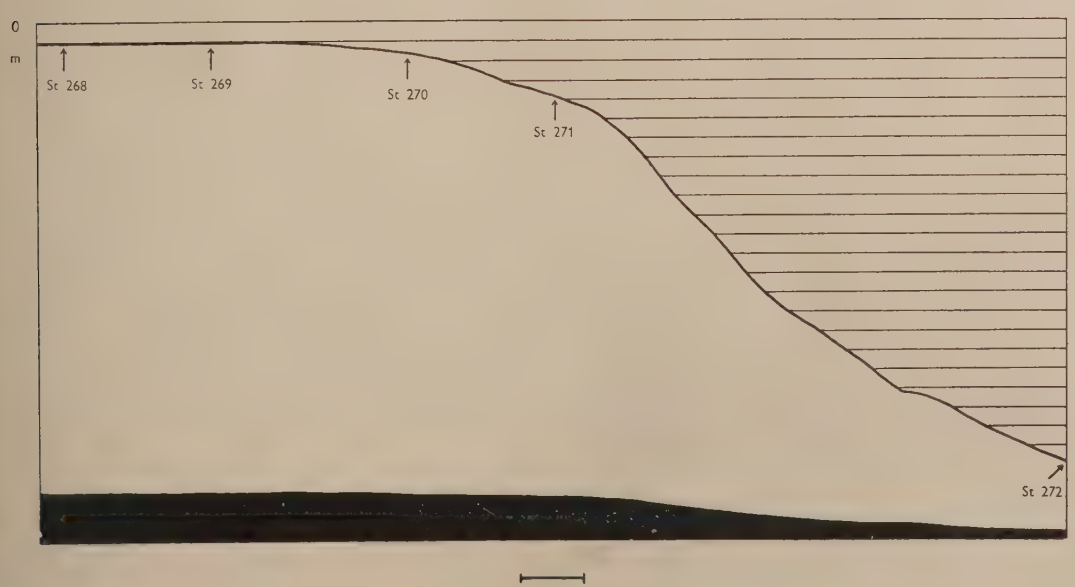

16–17



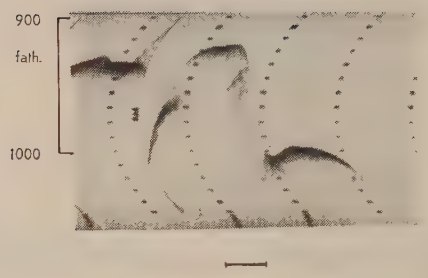

16–18



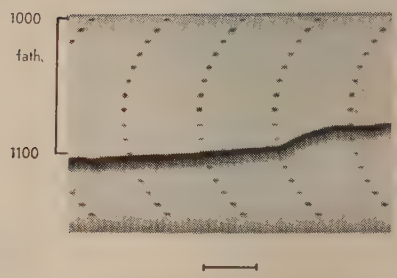

16–19



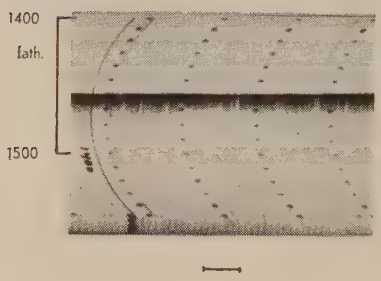
17 – A



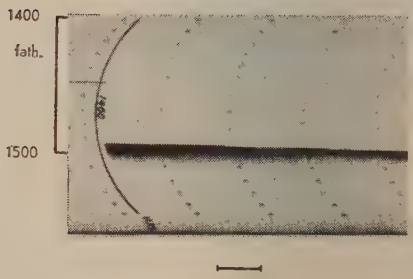

17 – B



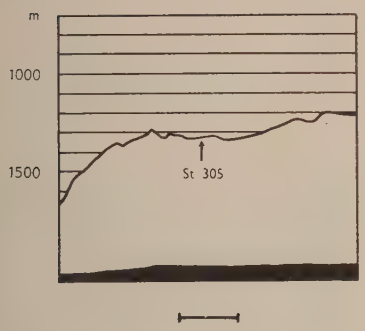

17 – C



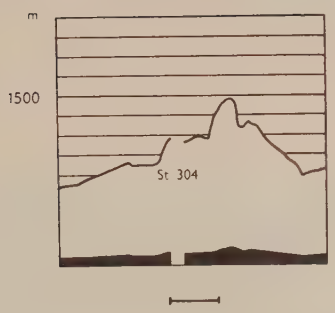

17 – D



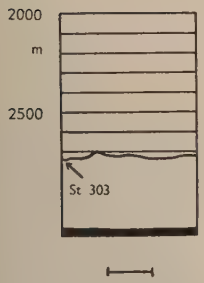
17–1



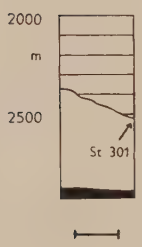

17–2



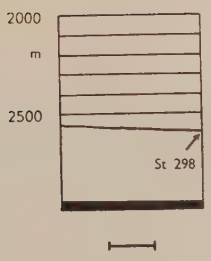

17–3




17–4

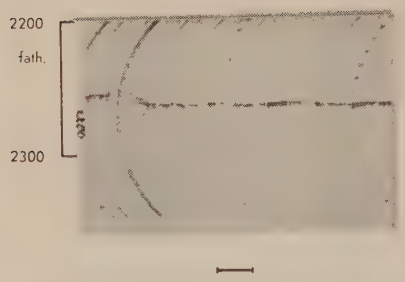



17–5

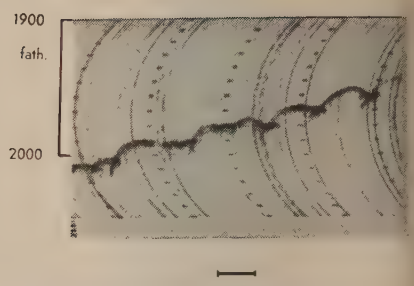


PROFILE 18.

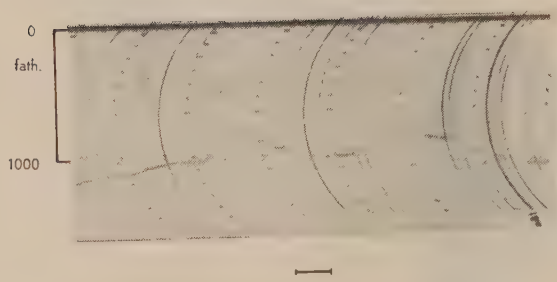
18 – A



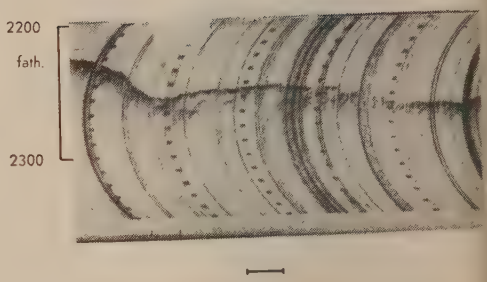

18 – B



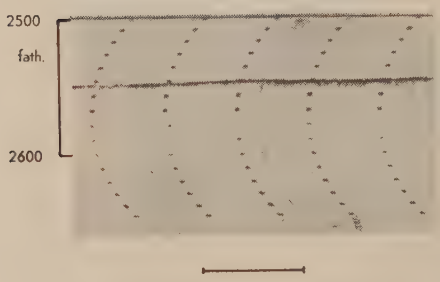

18 – C



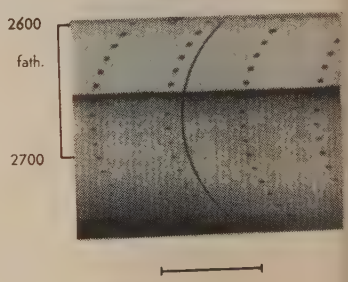

18 – D



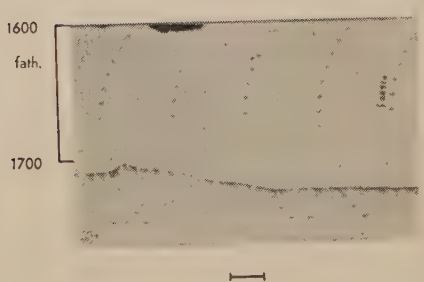

18 – E



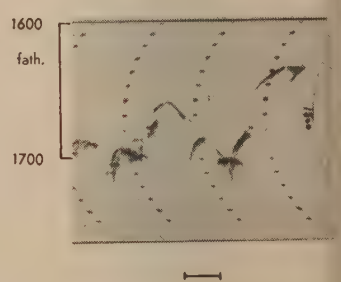

18 – F



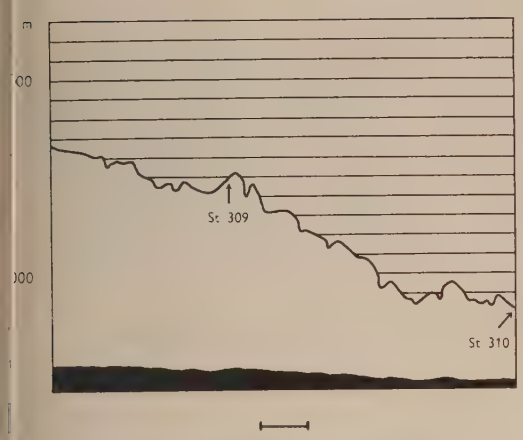

18 – G



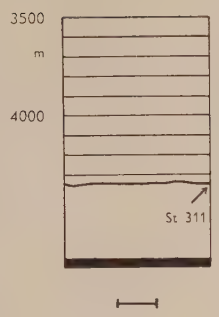

18 – H



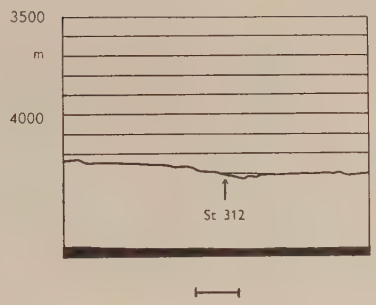
18–1



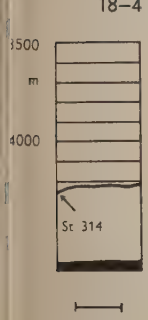

18–2



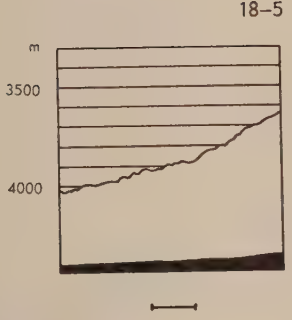

18–3



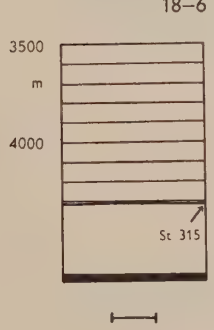

18–4



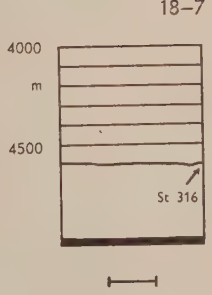

18–5



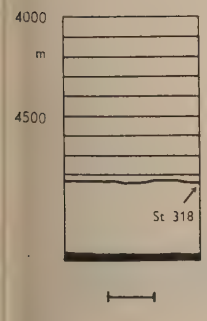

18–6



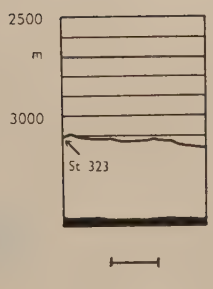

18–7



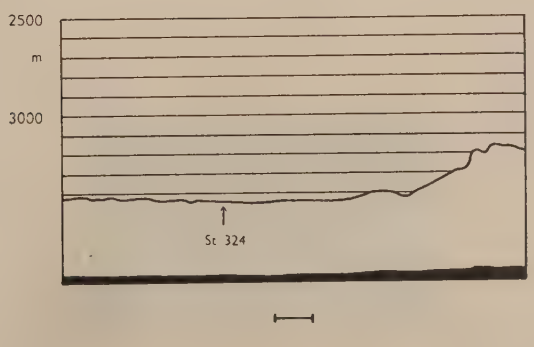

18–8




18–9

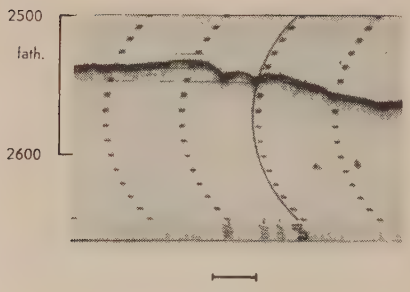



18–10

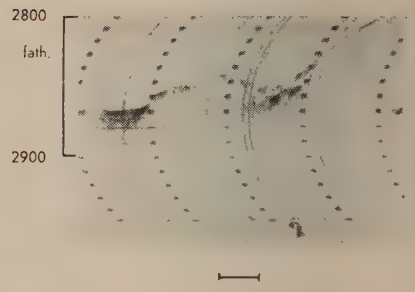


PROFIL E 19.

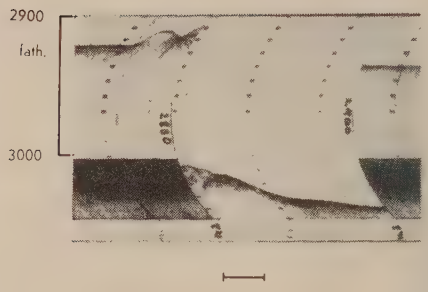
19 – A



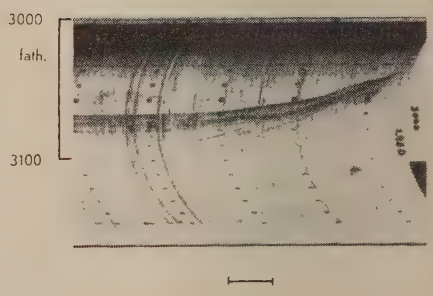

19 – B



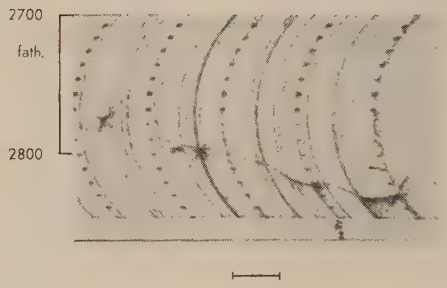

19 – C



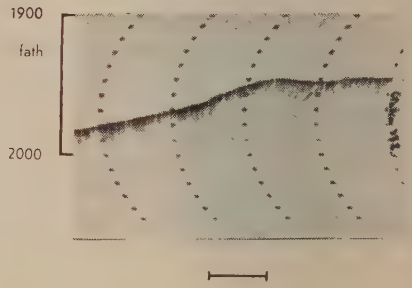

19 – D



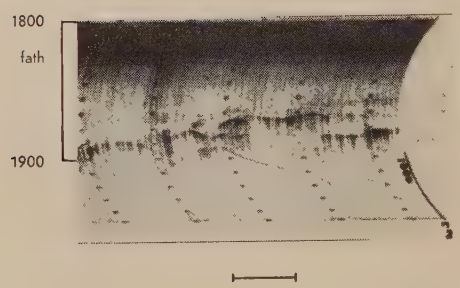

19 – E



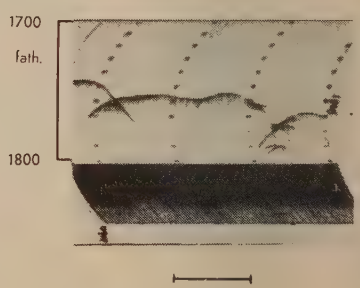

19 – F



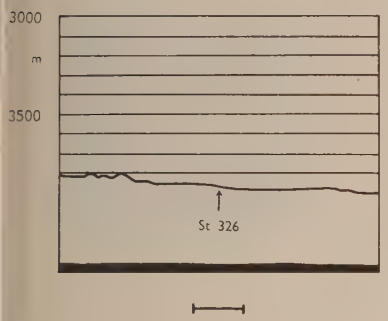

19 – G



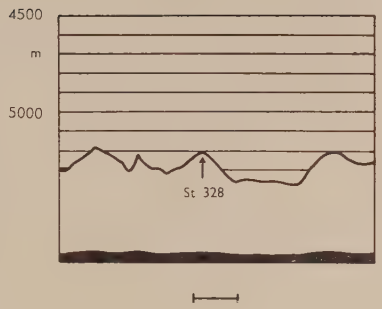

19 – H



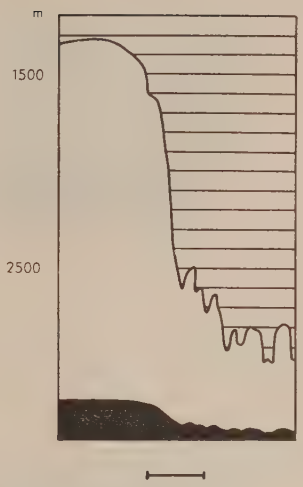
19–1



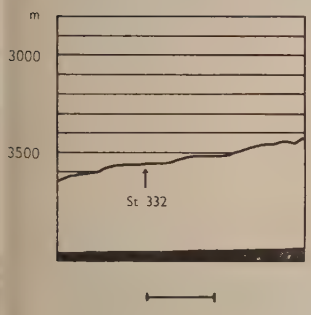

19–2



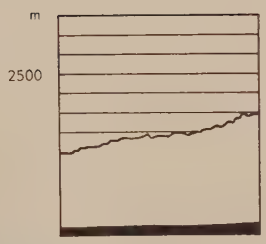

19–3



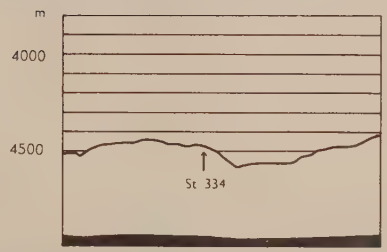

19–4



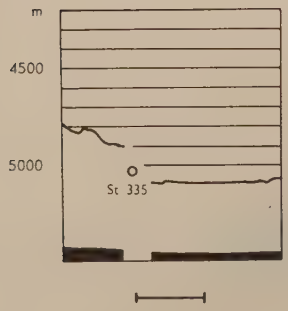

19–5



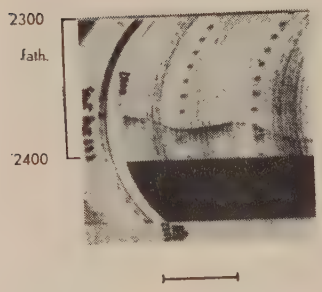

19–6



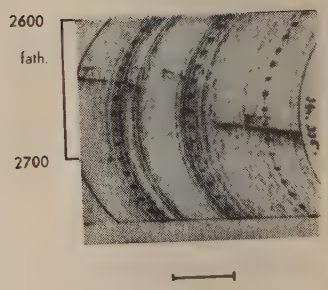

19–7



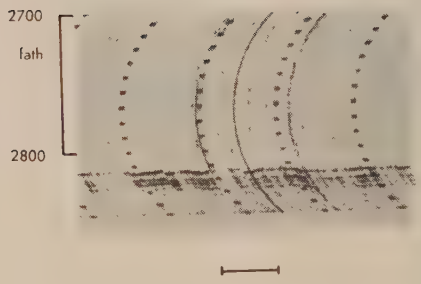
19 – I



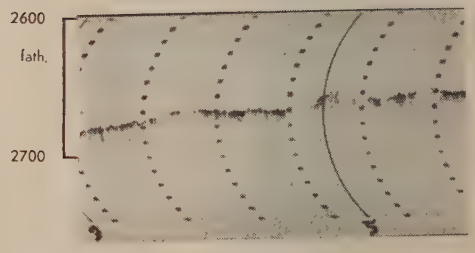

19 – K



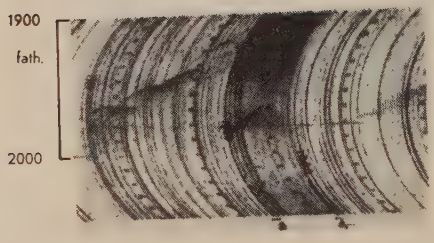

19 – L



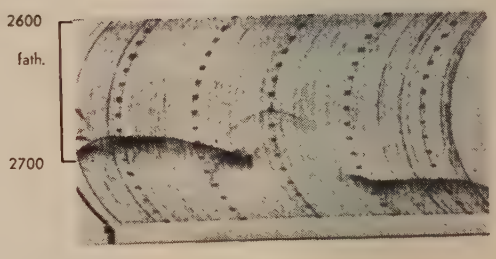

19 – M




19 – O

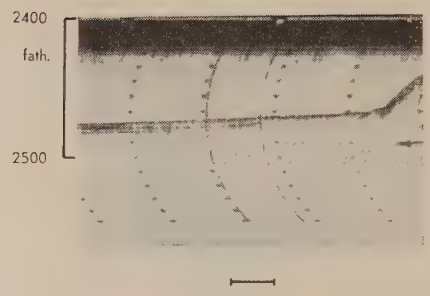



19 – N

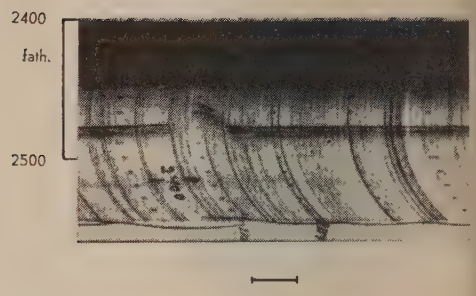


PROFILE 20.

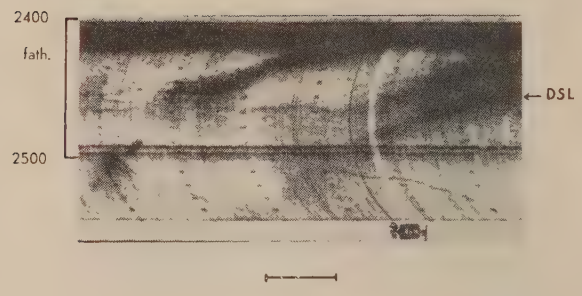
20 – A



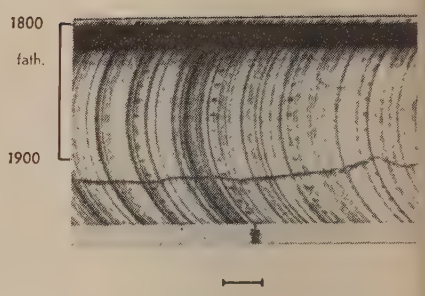

20 – B



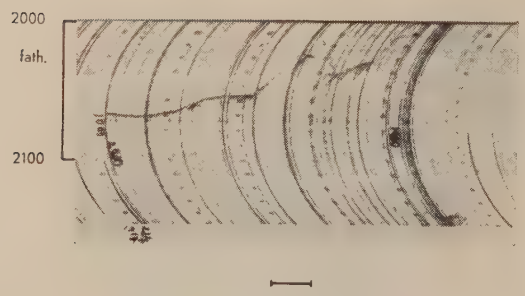

20 – C



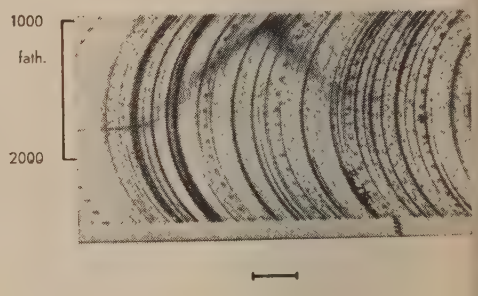

20 – D



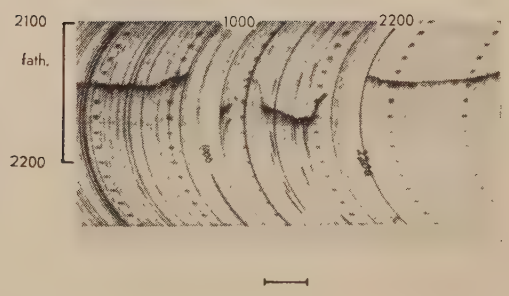

20 – E



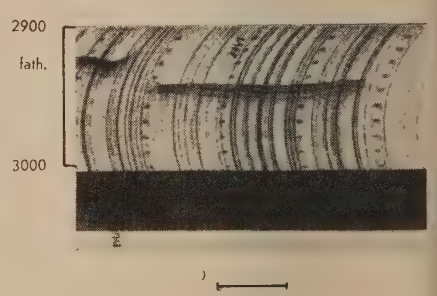

20 – F



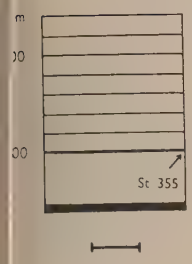

20 – G



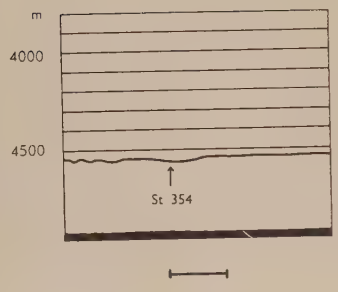

20 – H



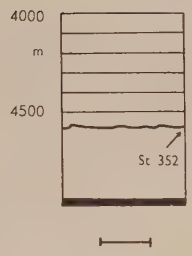
20–1



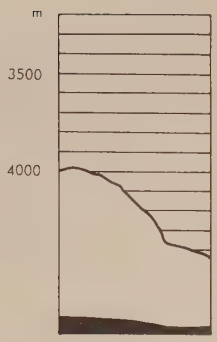

20–2



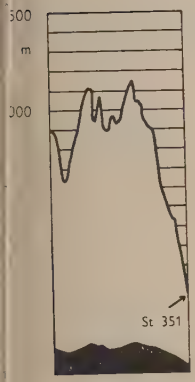

20–3



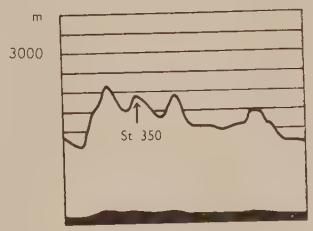

20–4




20–4 A




20–5

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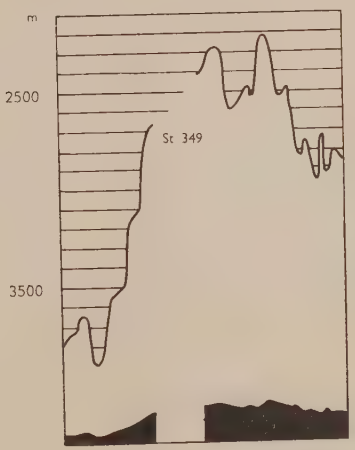
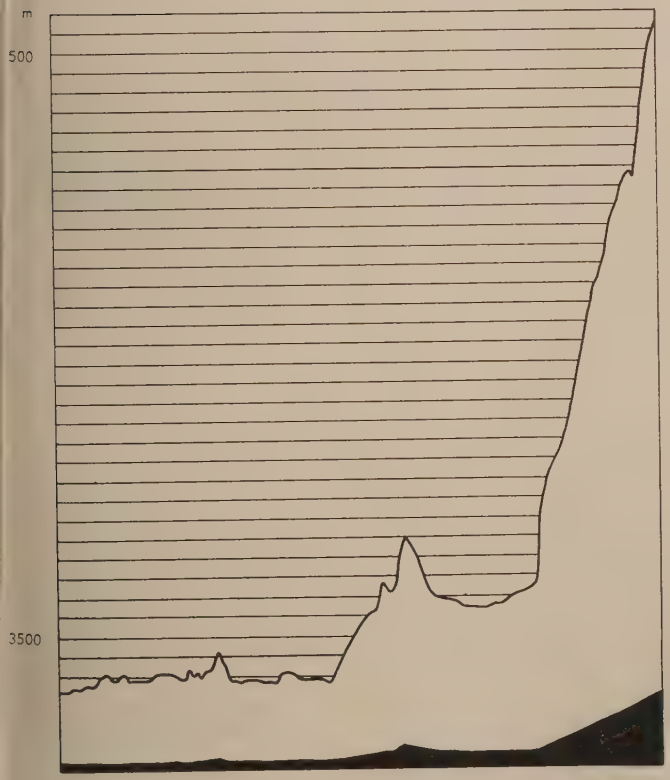
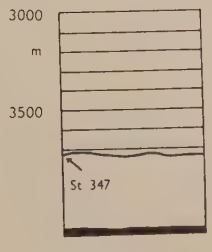


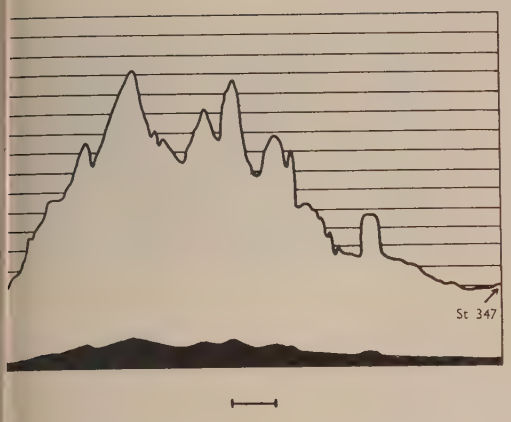

20–7



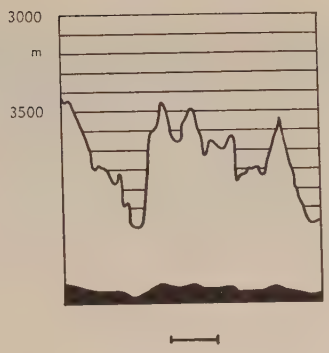

20–8



20–8 A

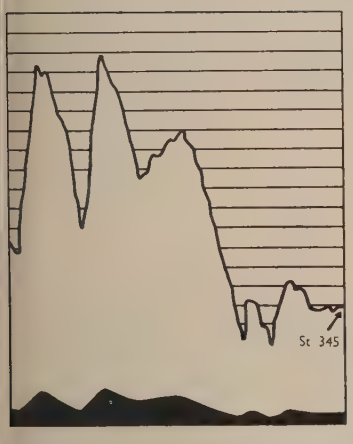



20–9

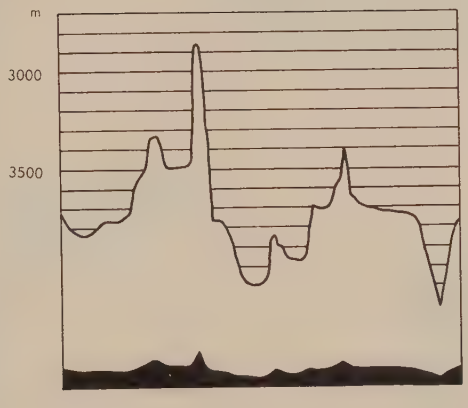



20–10

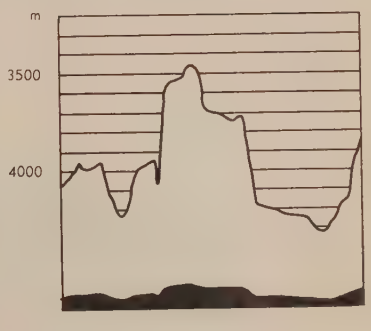
20–10 A




20–11




20–12

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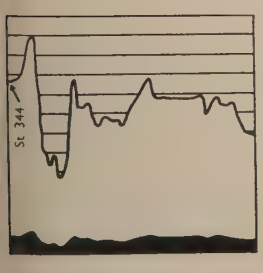
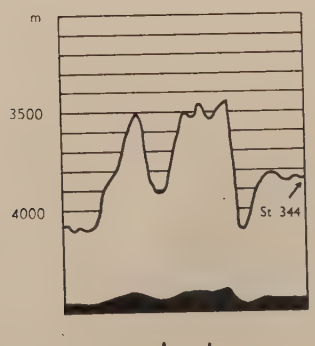



20–13 A

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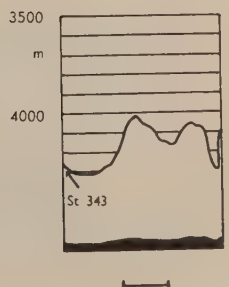
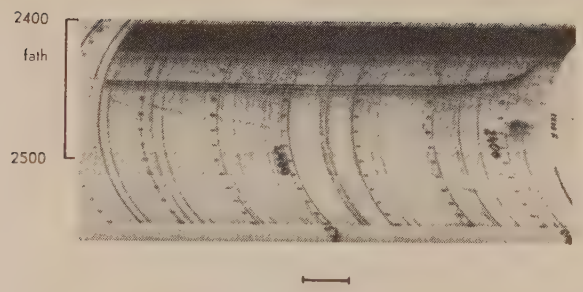
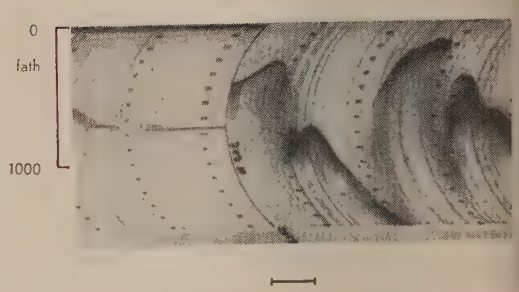


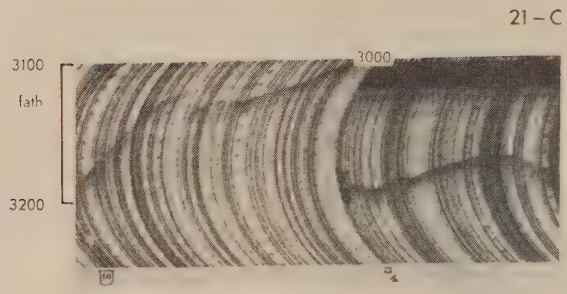
21 – A



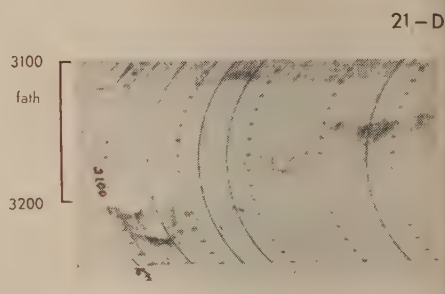

21 – B



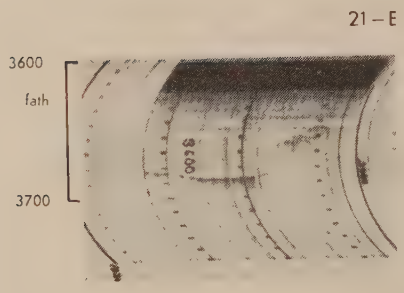

21 – C



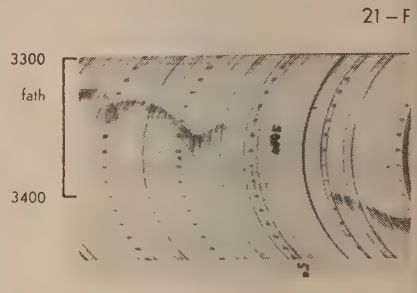

21 – D



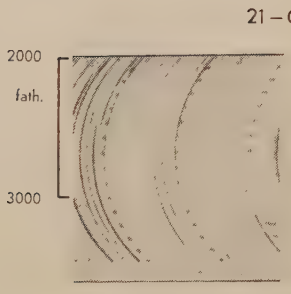

21 – E



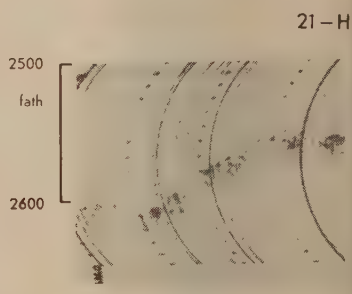

21 – F

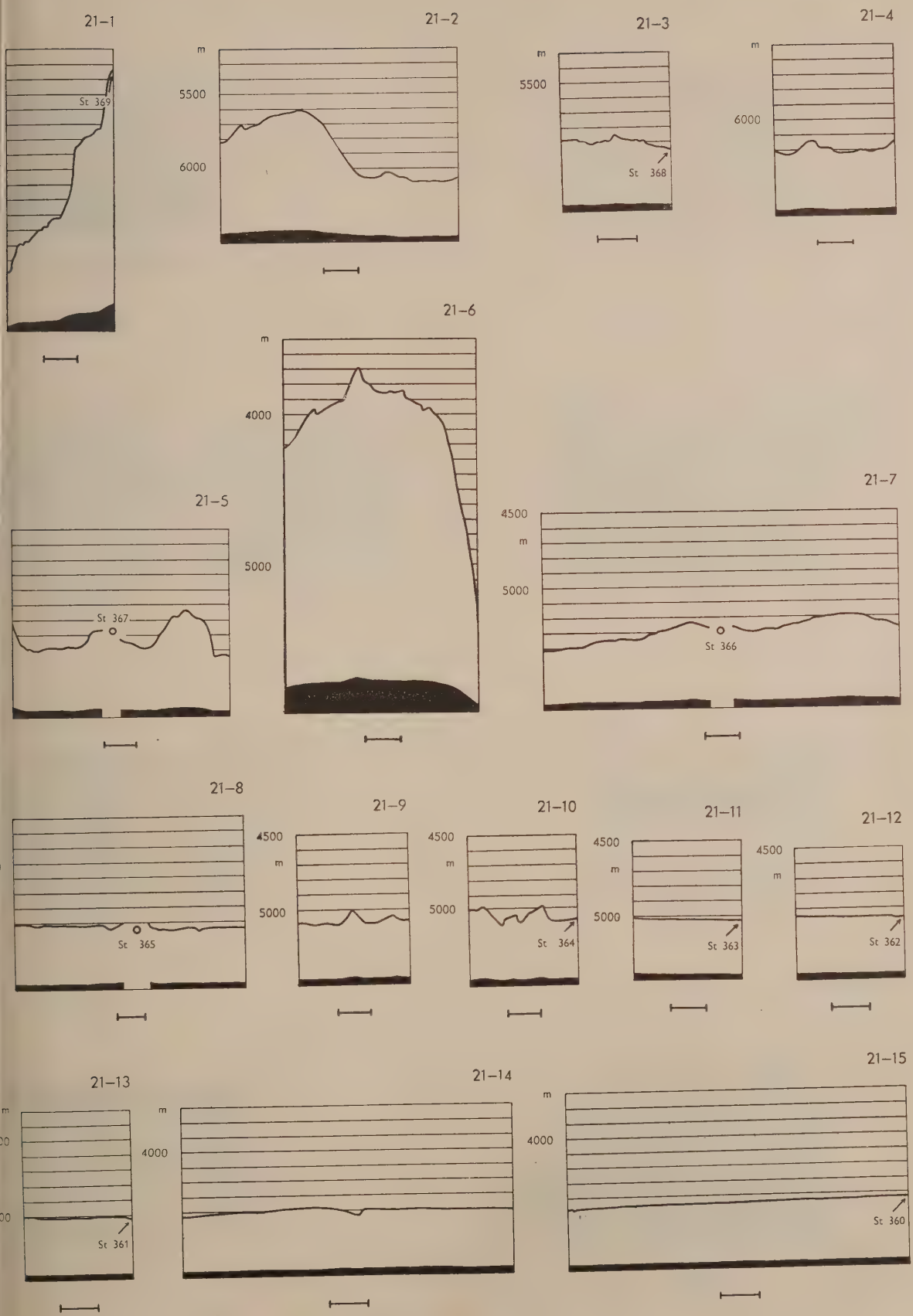



21 – G




21 – H

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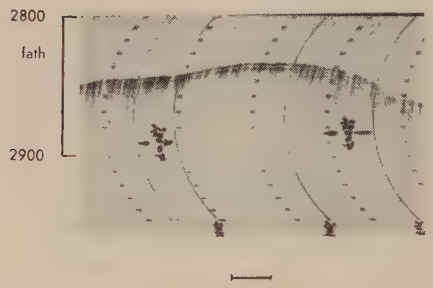
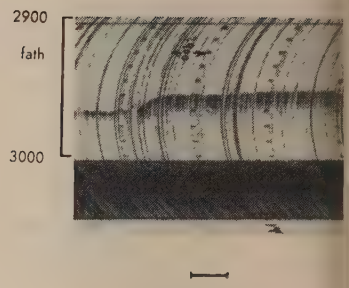
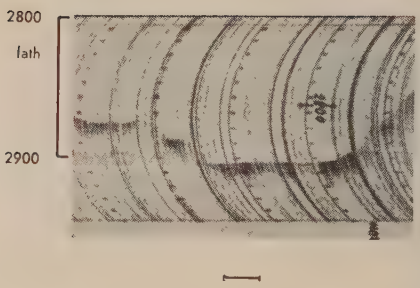
21 – I



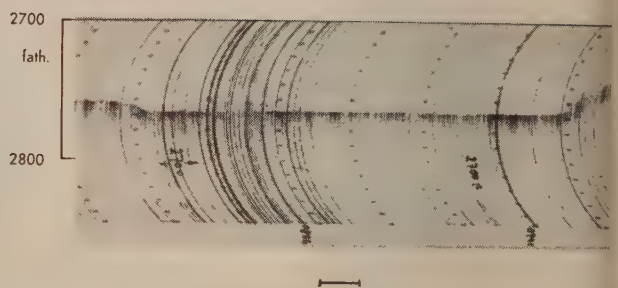

21 – K



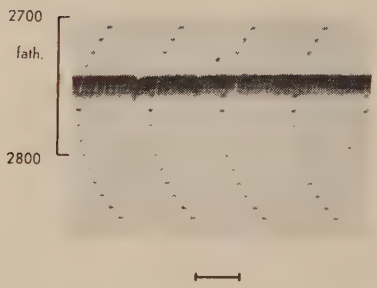

21 – L



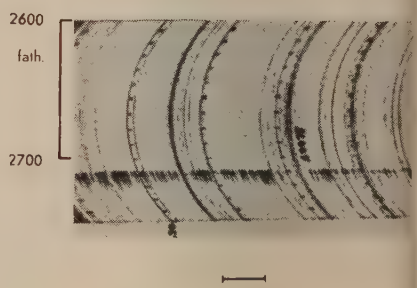

21 – M



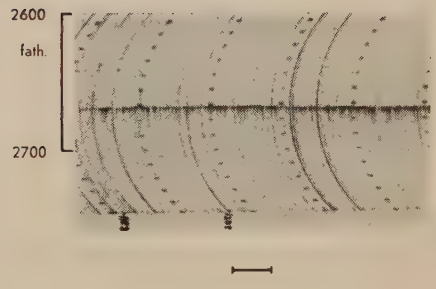

21 – N



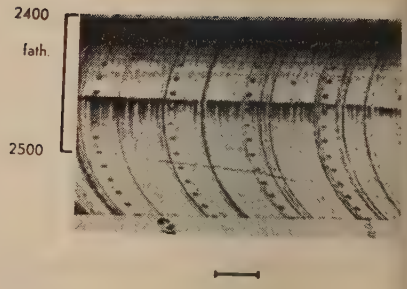

21 – O




21 – P




21 – Q



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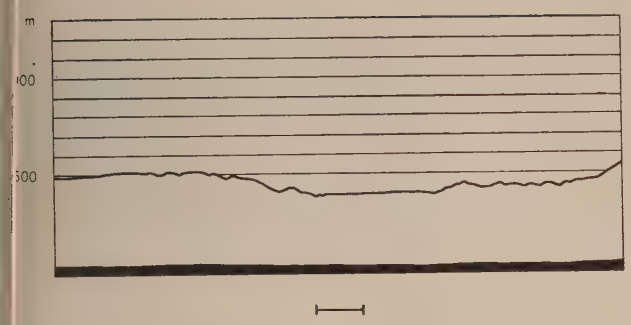
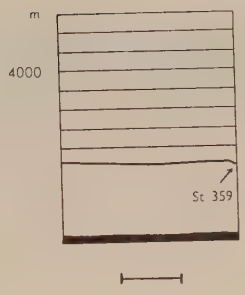



21–17

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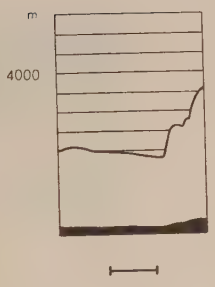


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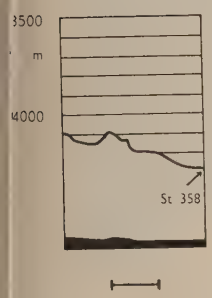


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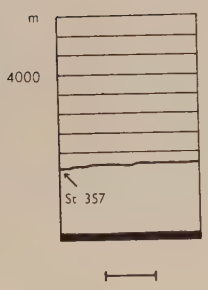
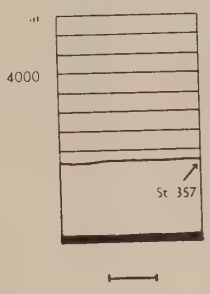
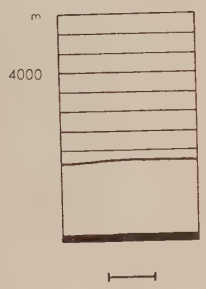


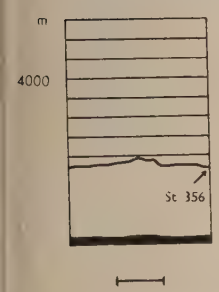

21–21



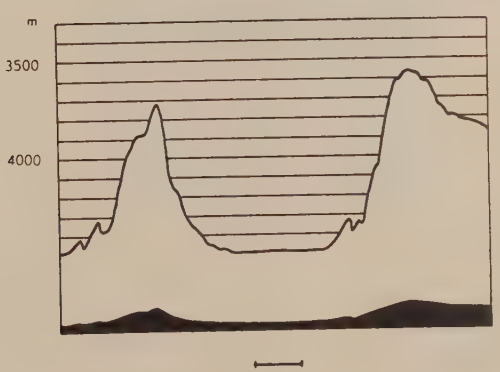

21–22



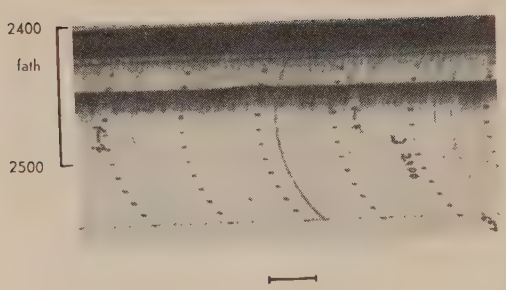

21–23



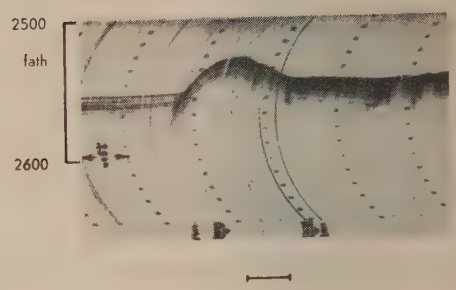

21–24



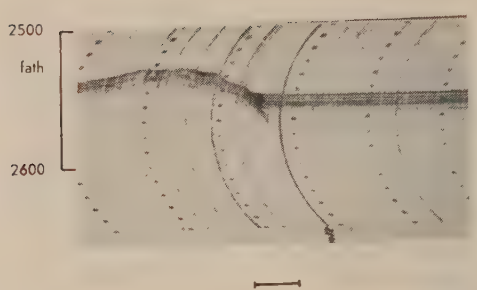
21 – R



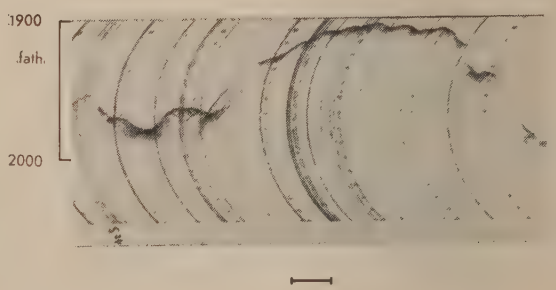

21 – S



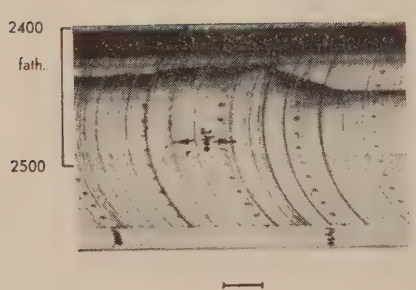

21 – T



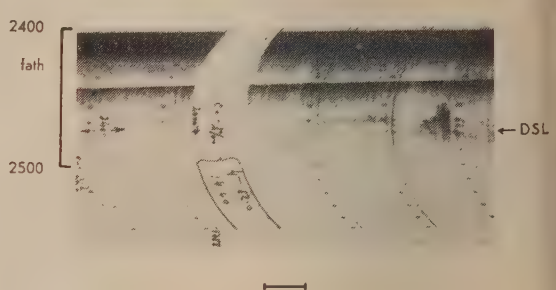

21 – U



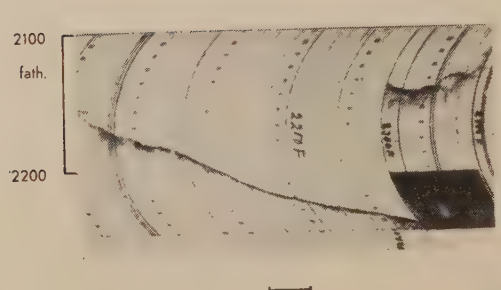

21 – V



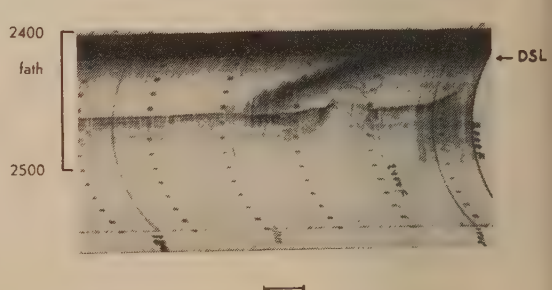

21 – W



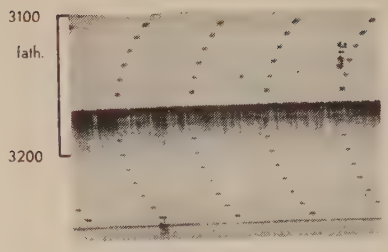

21 – X



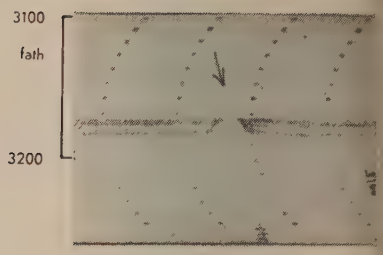

21 – Y



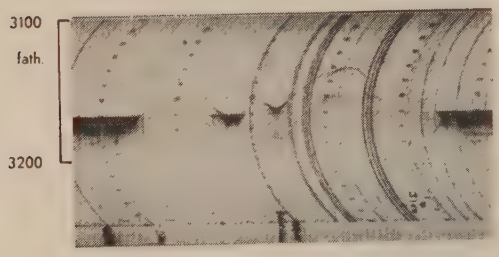
22 – A



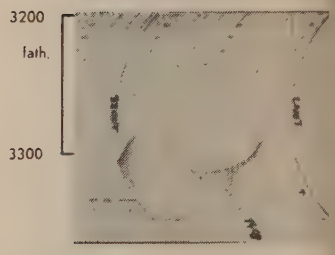

22 – B



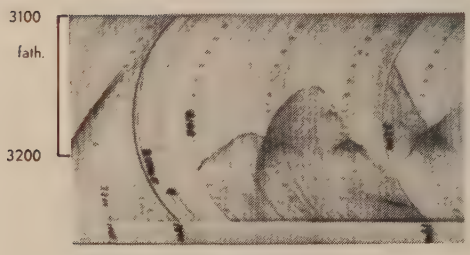

22 – C



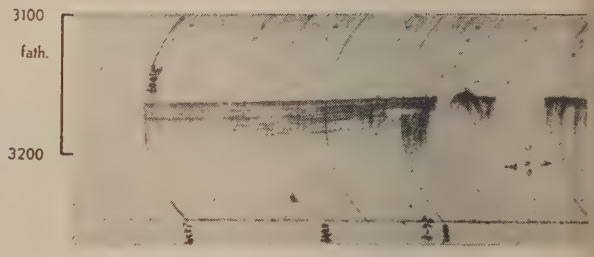

22 – D



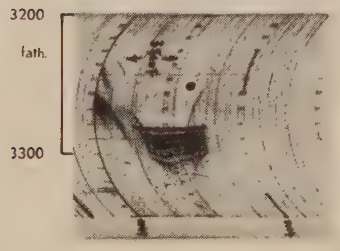

22 – E



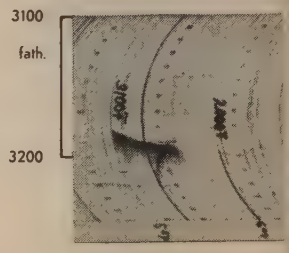

22 – F



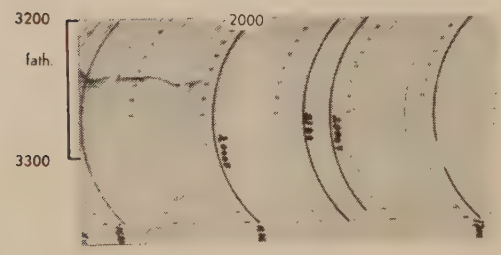

22 – G



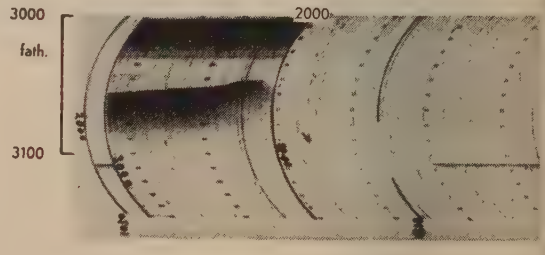

22 – H



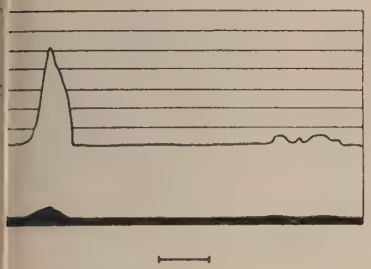

22 – I




22 – K



22–1



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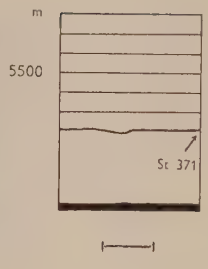


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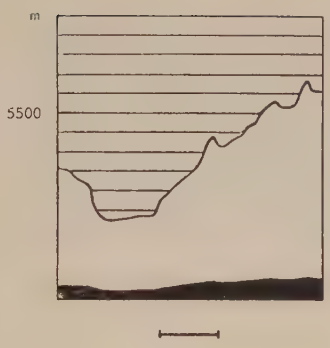


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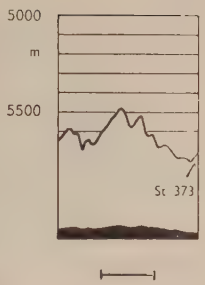


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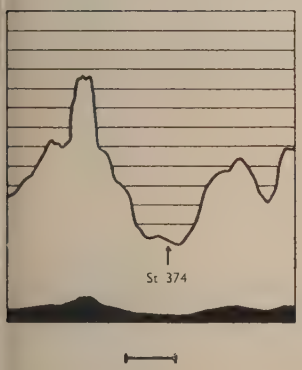


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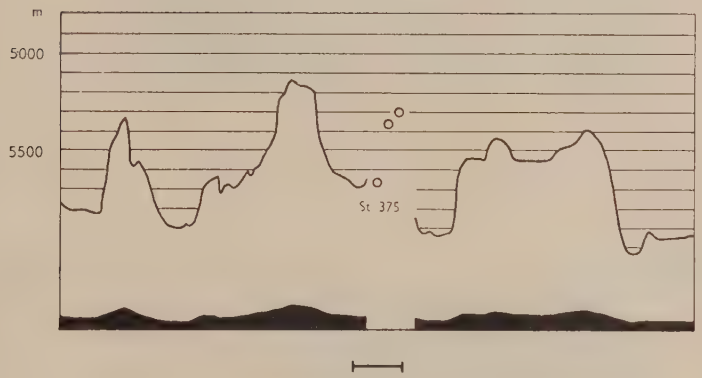


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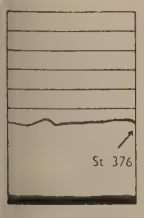


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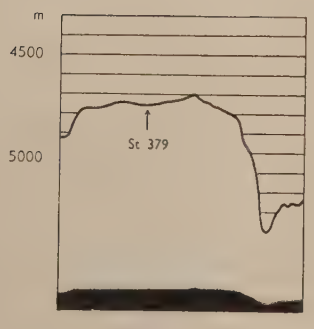


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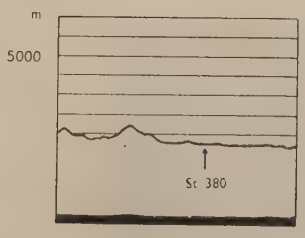


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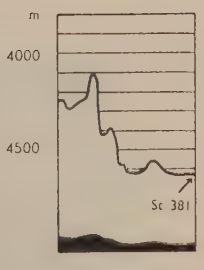
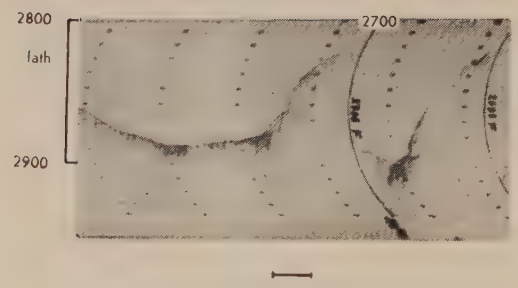
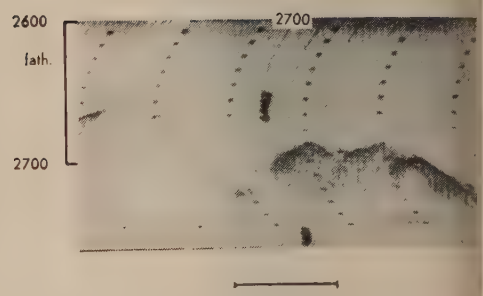


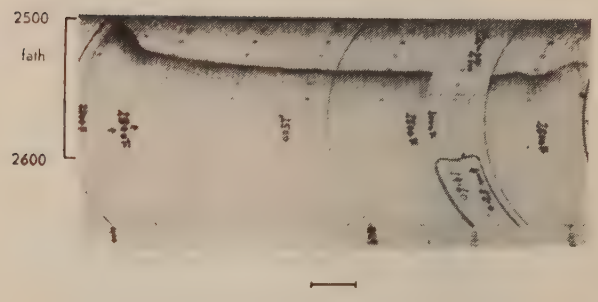
22 - L



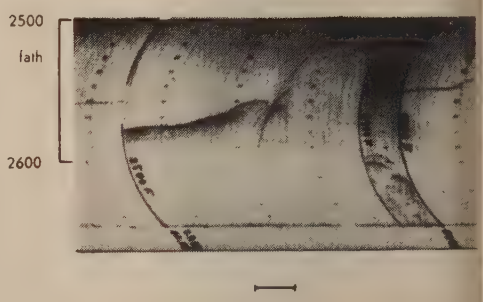

22 - M




22 – N




22 – O

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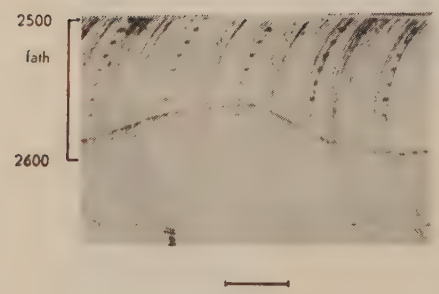


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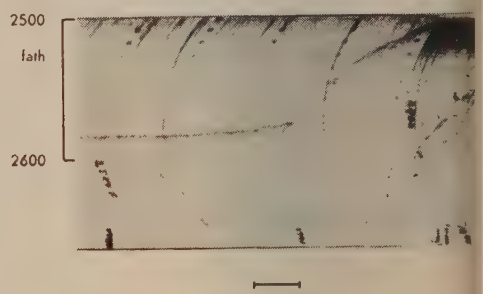


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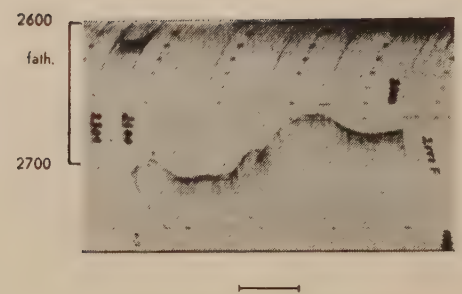


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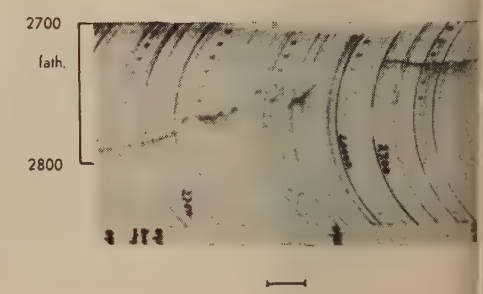

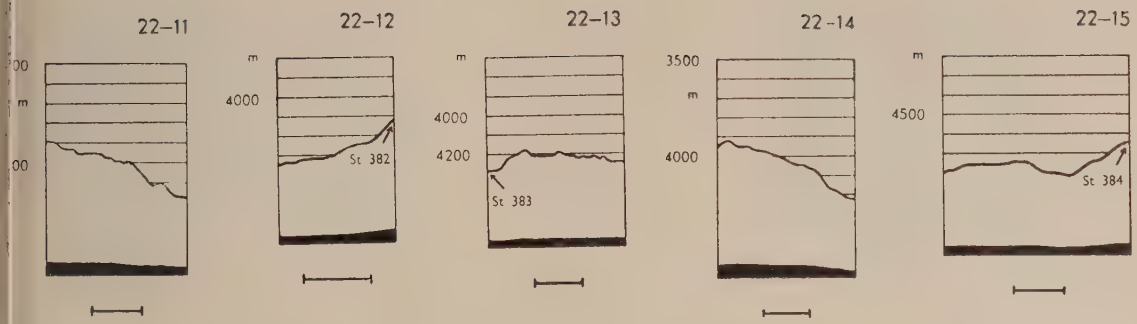
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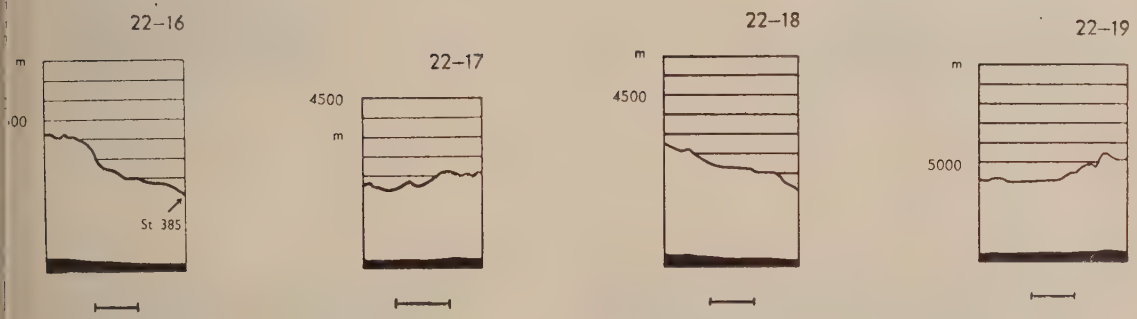
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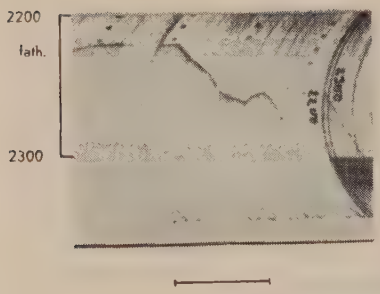
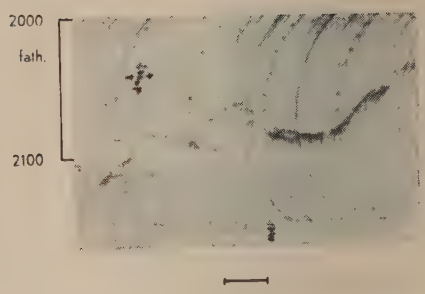
PROFILE 23.

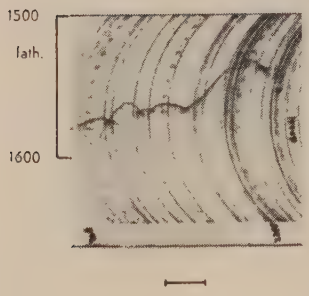
23 – A




23 – B




23 – C

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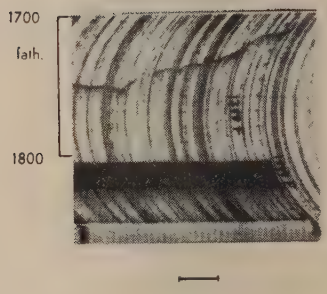
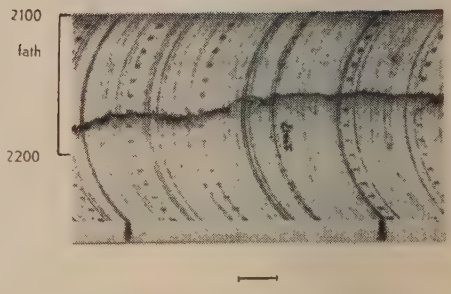
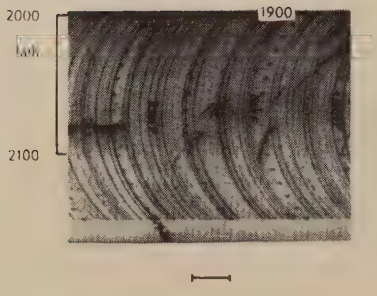



23 – E

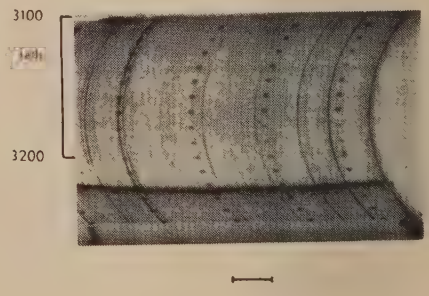
23 – F




23 – G




23 – H



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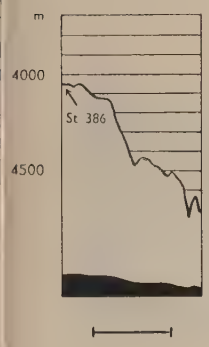


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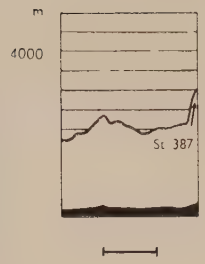


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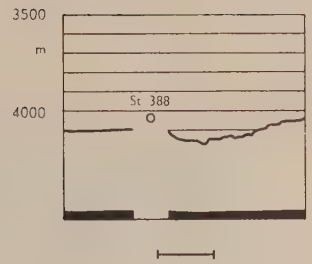


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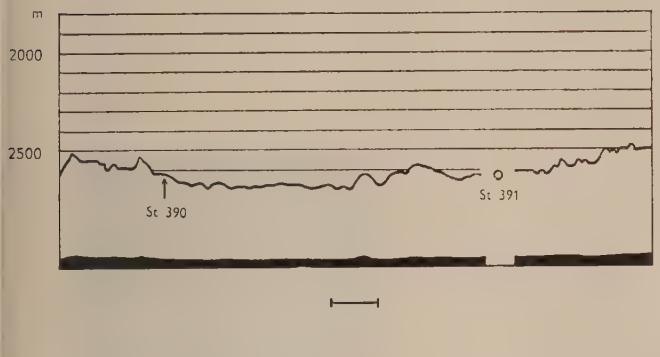


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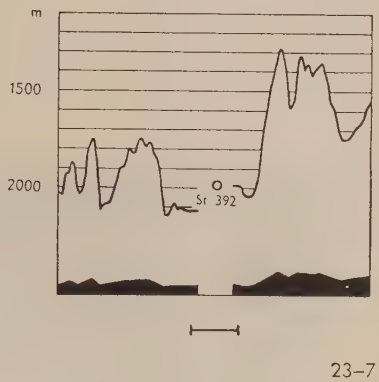


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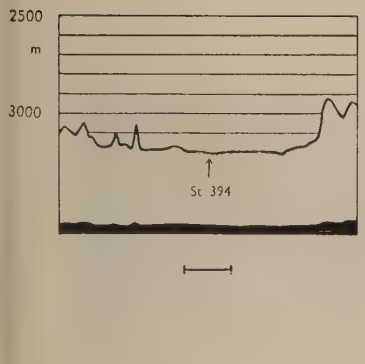


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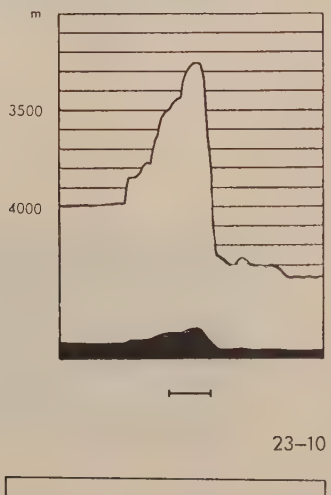


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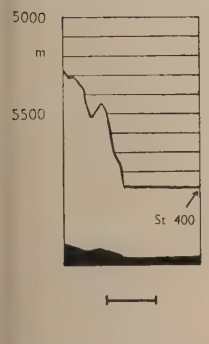


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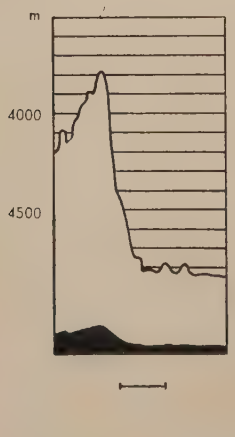


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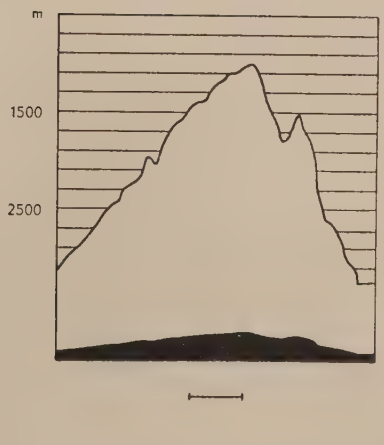
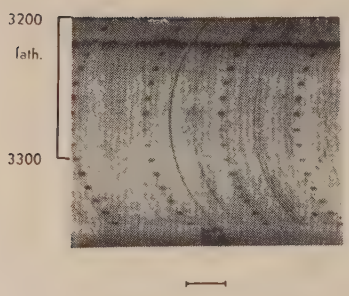
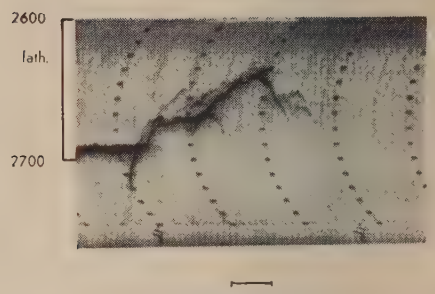


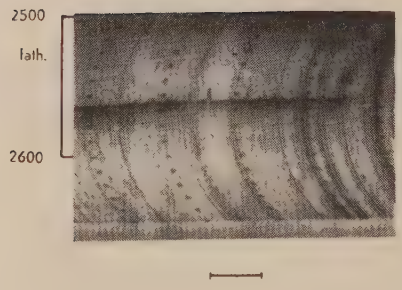
23 – I



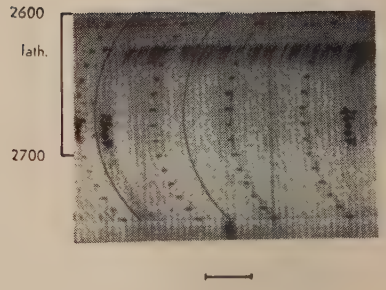

23 – K



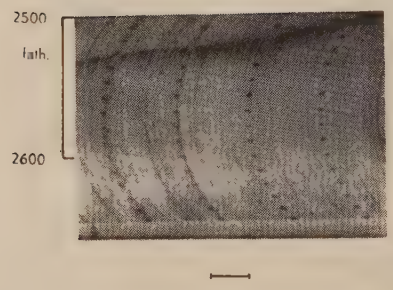

23 - L



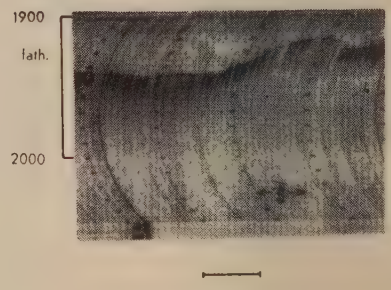

23 - M



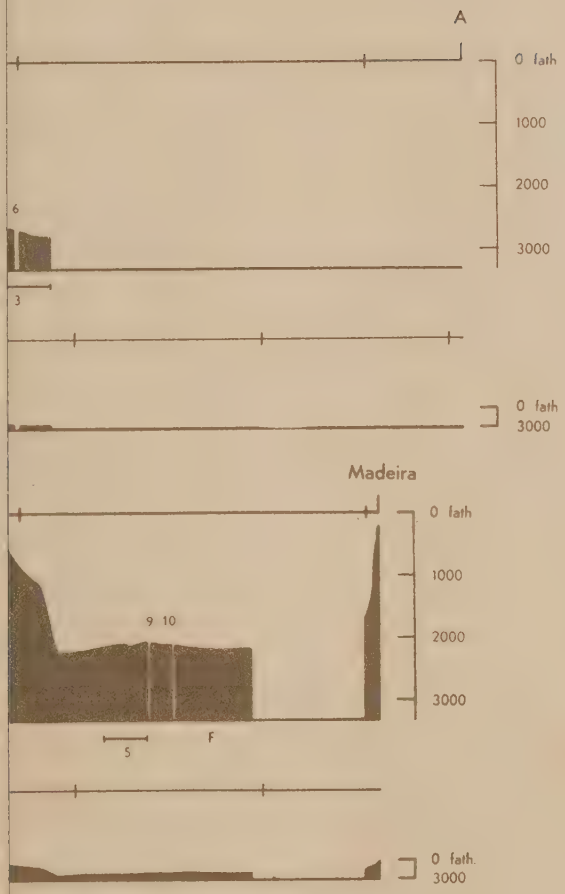

23 - N




23 – O



## Profile I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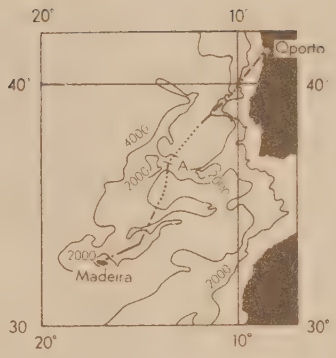
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Profile II

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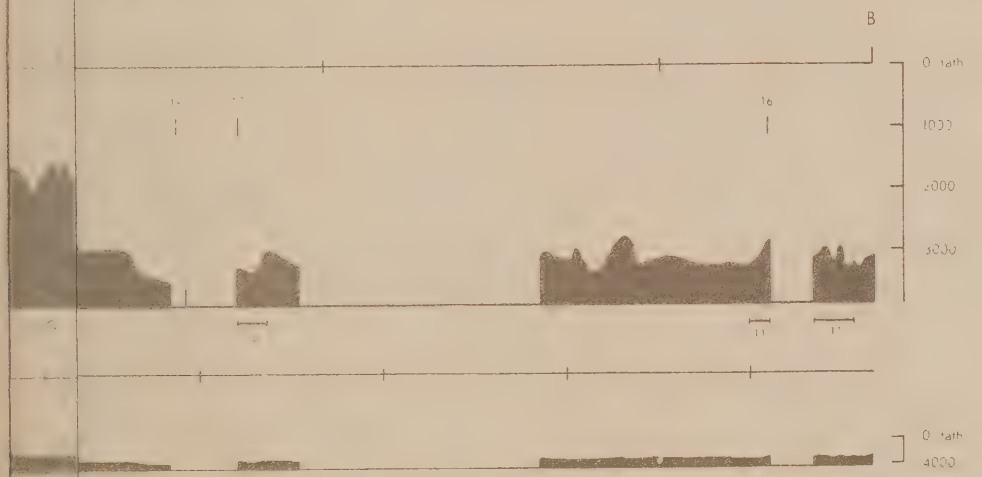
B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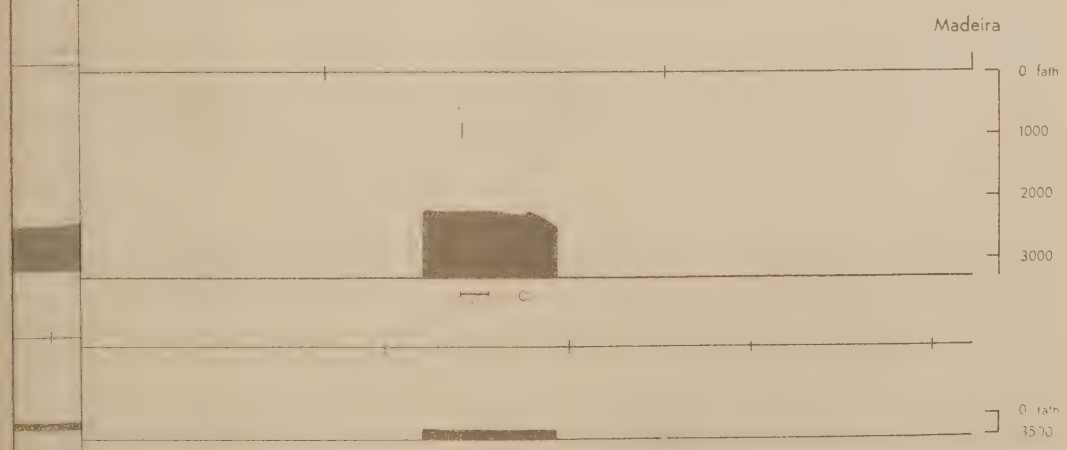
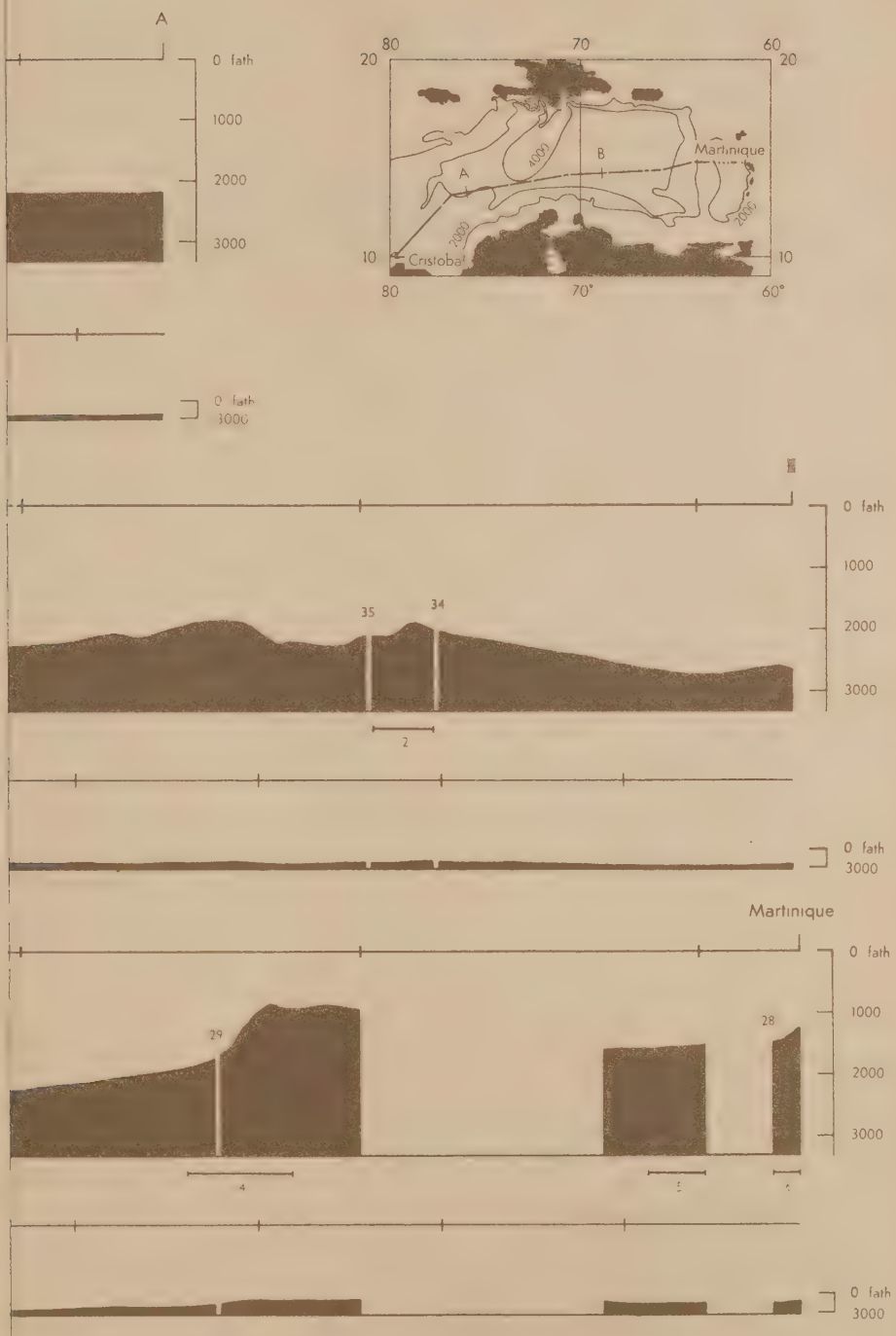
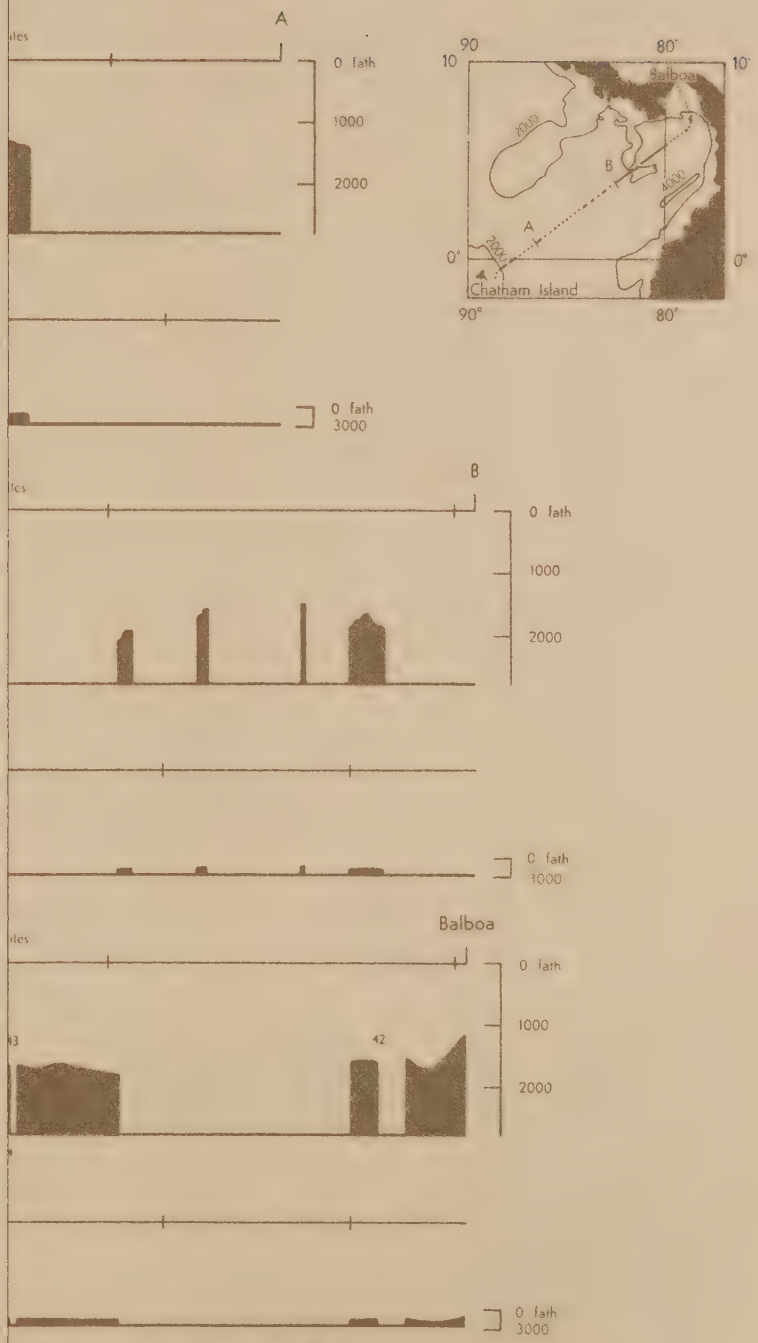
0 fath
4000


Madeira
0 fath
1000
2000
3000
C
0 fath

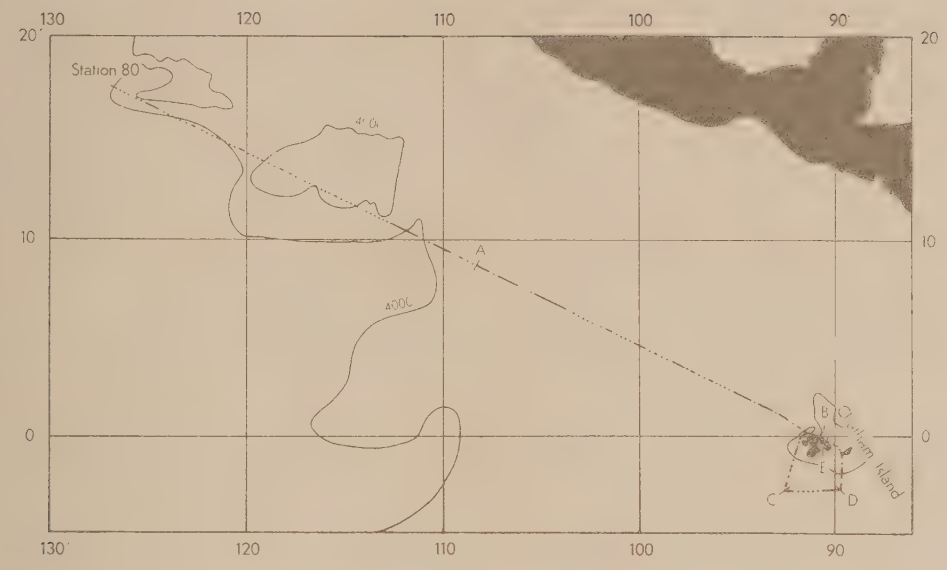
## Profile III

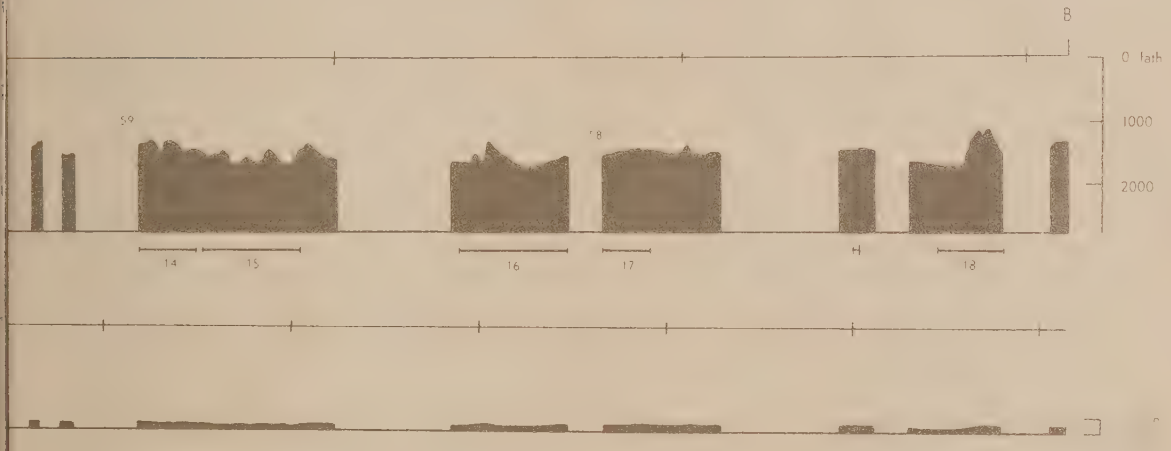

A
0 fath
1000
2000
3000
80
70
60
20
20
10
10
80
70°
60°
4000
2000
2000
A
B
Martinique
Cristobal
0 fath
3000
35
34
2
0 fath
1000
2000
3000
0 fath
3000
Martinique
29
28
4
0 fath
1000
2000
3000
0 fath
3000

## Profile IV

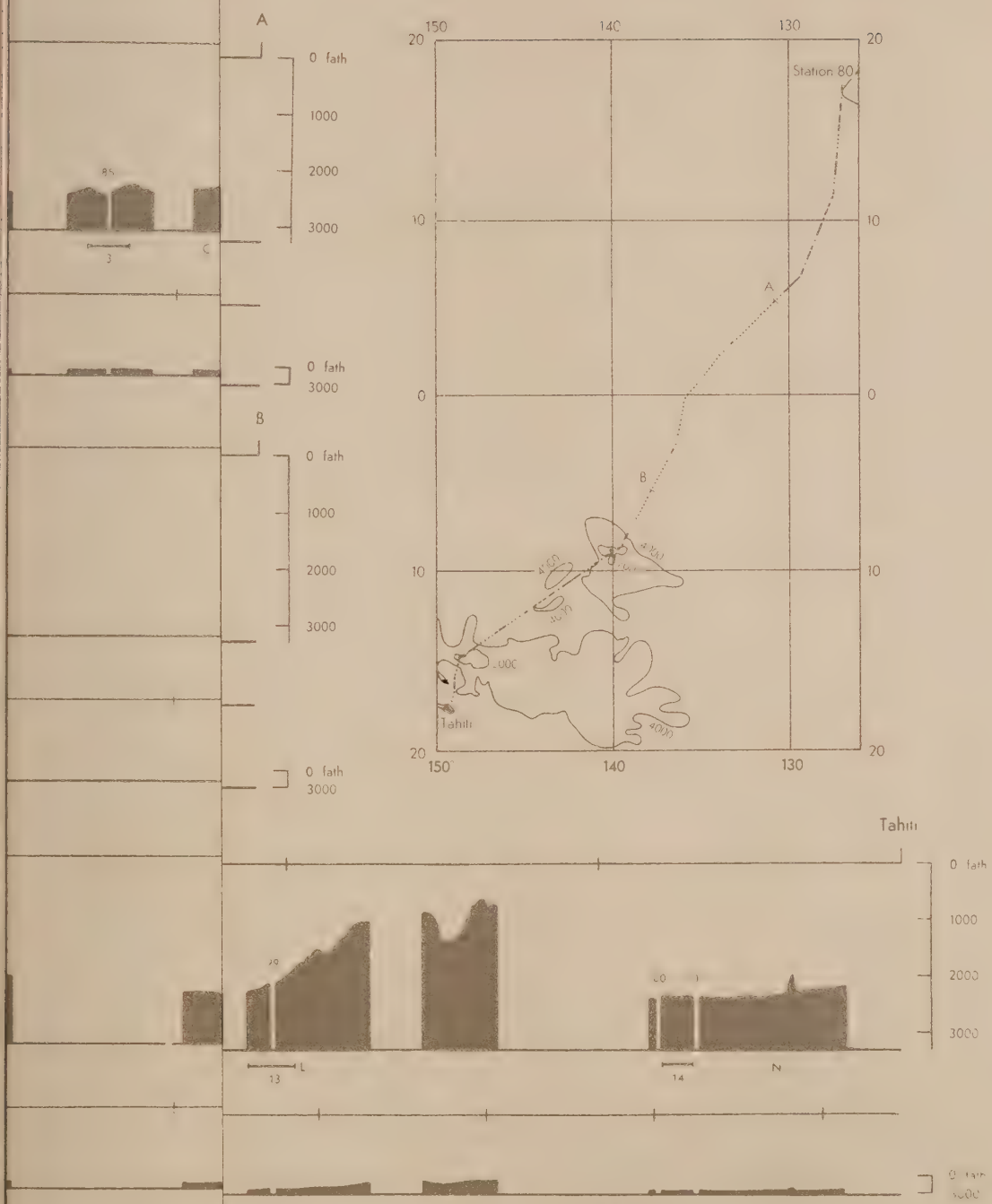

A
0 fath
1000
2000
0 fath
3000
90°
80°
10°
0°
Balboa
Chatham Island
B
0 fath
1000
2000
0 fath
3000
Balboa
0 fath
1000
2000
0 fath
3000

Profile V

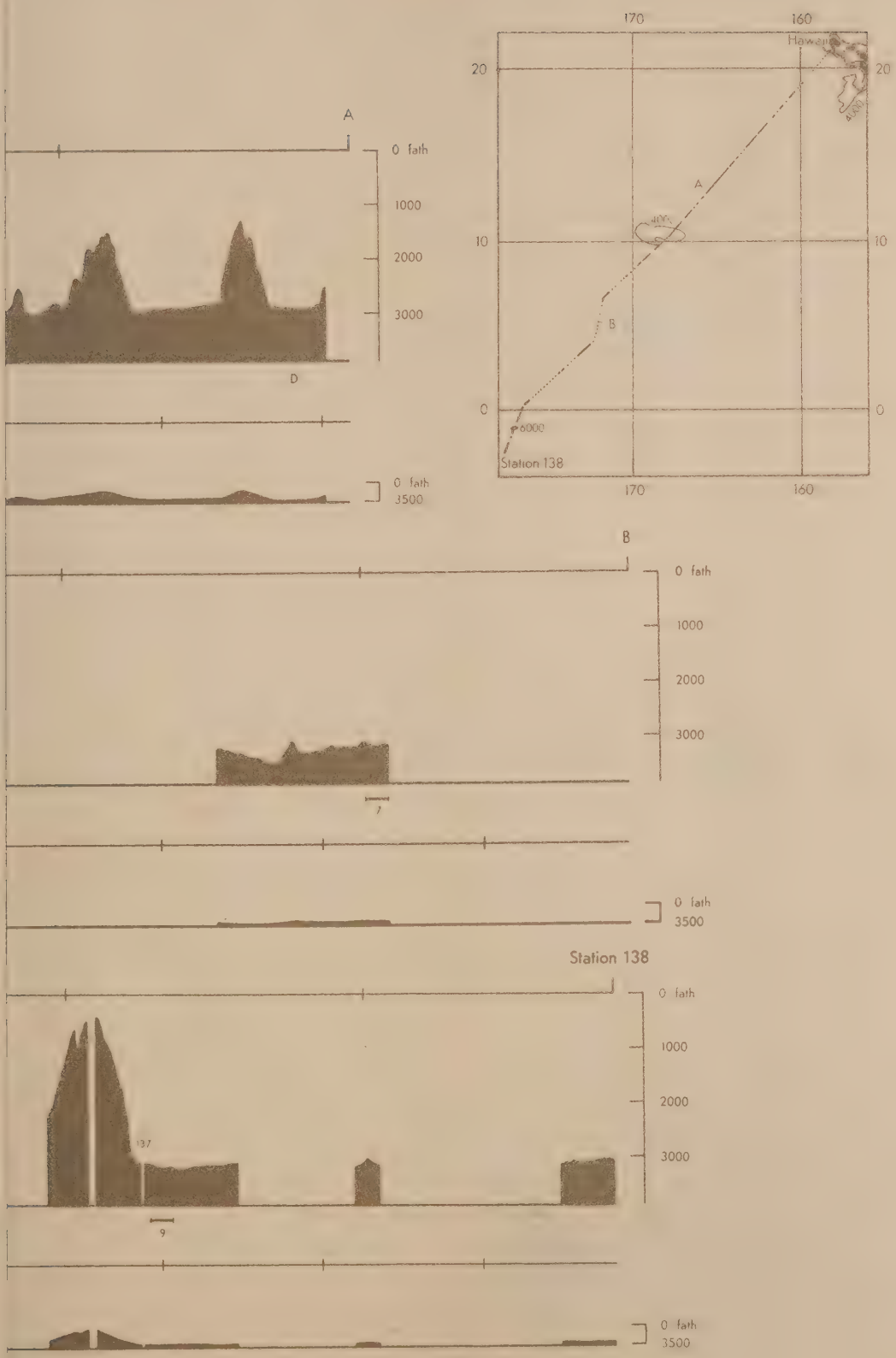

130
120
110
100
90
20
10
0
Station 80
4000
A
B
C
D
Durham Island


B
0 fath
1000
2000
59
58
14
15
16
17
18

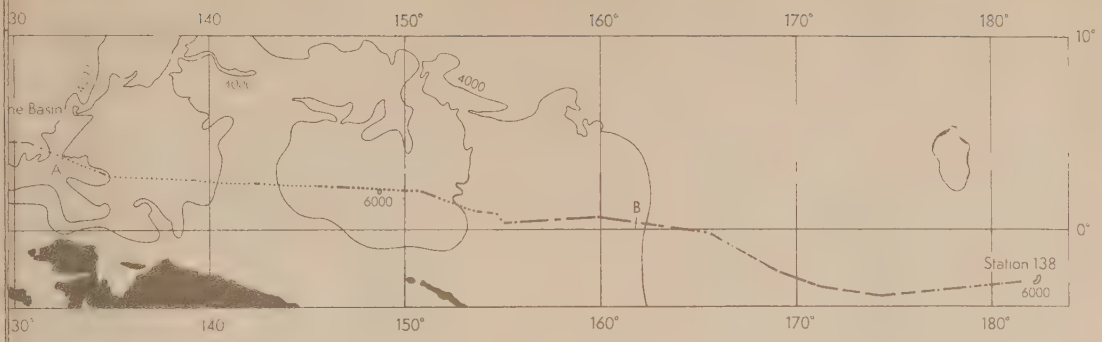
Profile VI

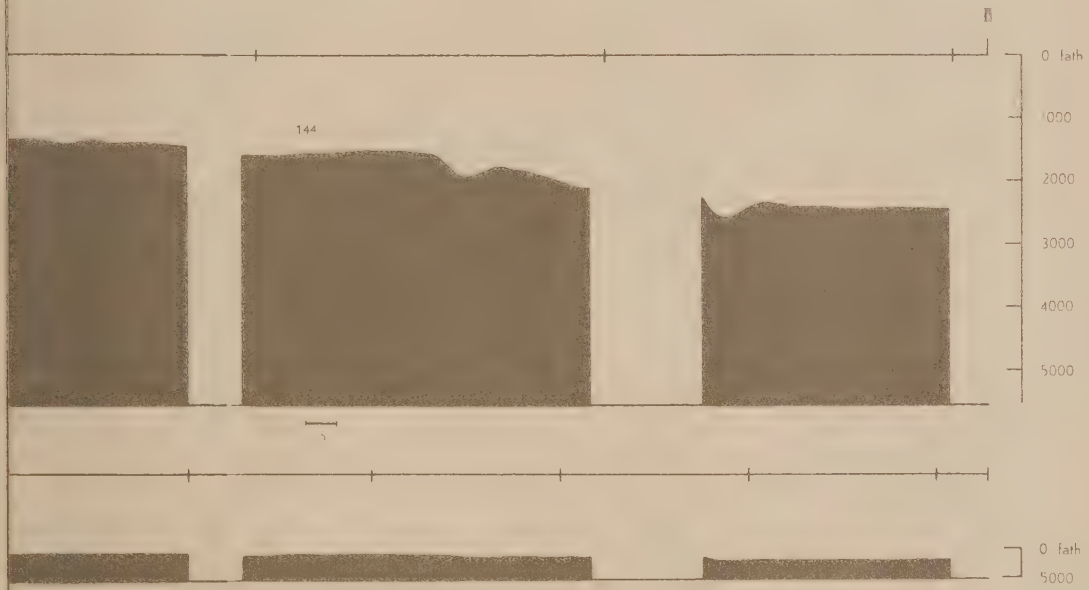

A
0 fath
1000
2000
3000
B
C
3
0 fath
3000
B
0 fath
1000
2000
3000
0 fath
3000
150
140
130
20
10
0
Station 804
A
B
Tahiti
Tahiti
0 fath
1000
2000
3000
L
13
14
N

# Profile VIII

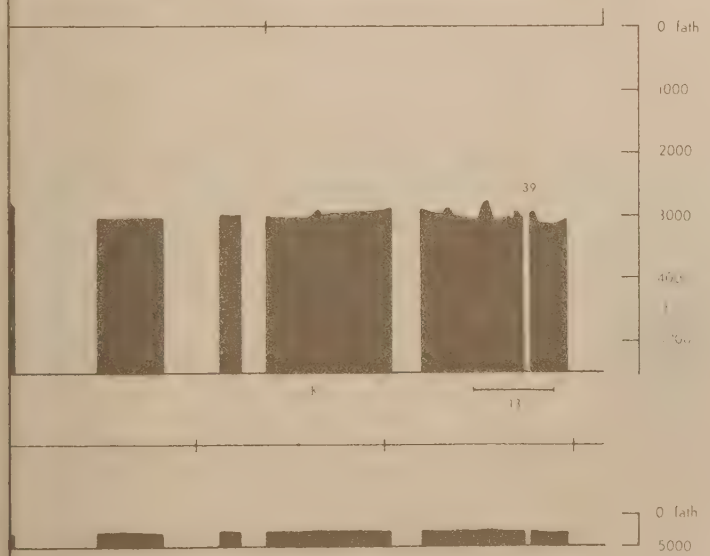


# Profile IX

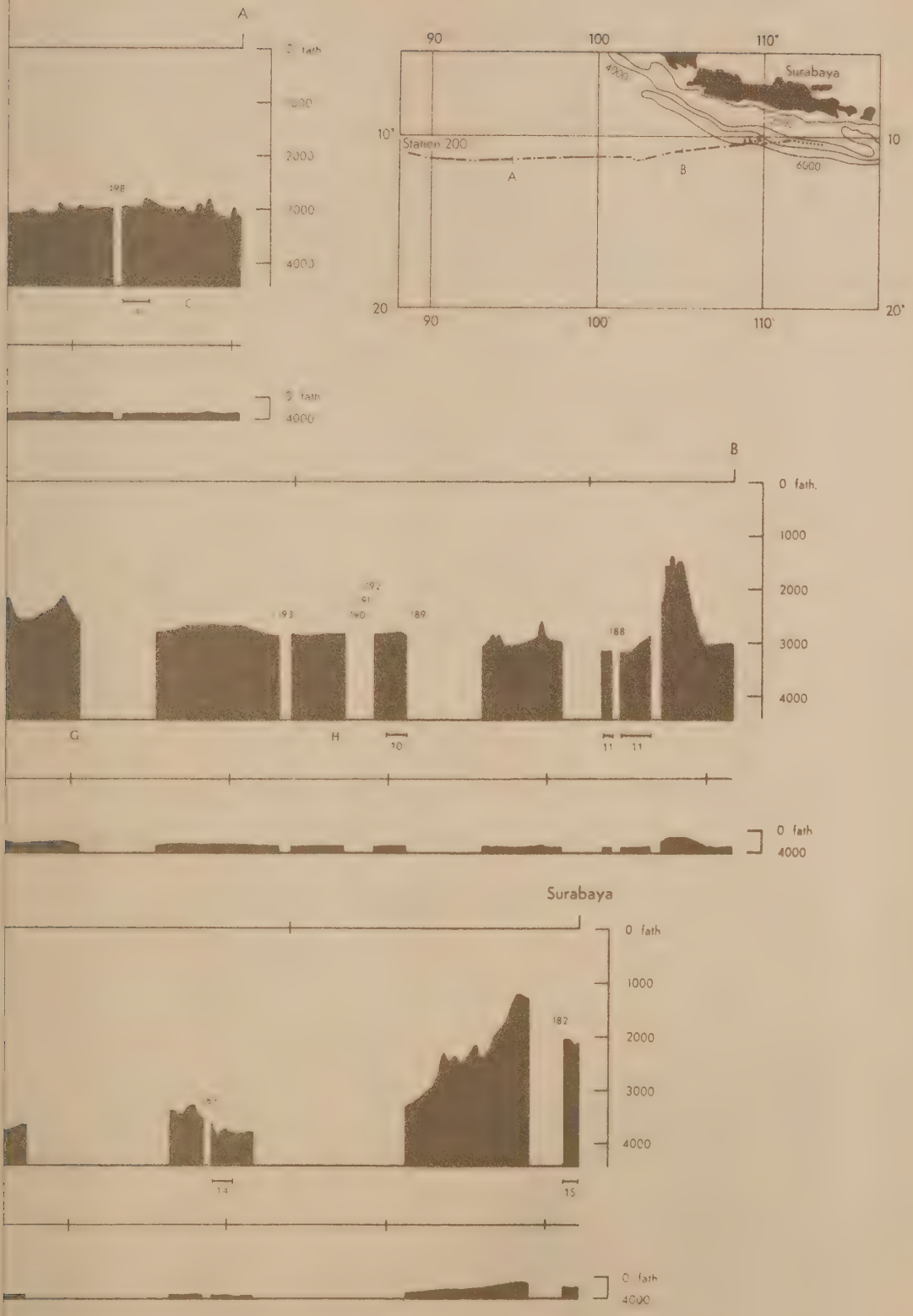


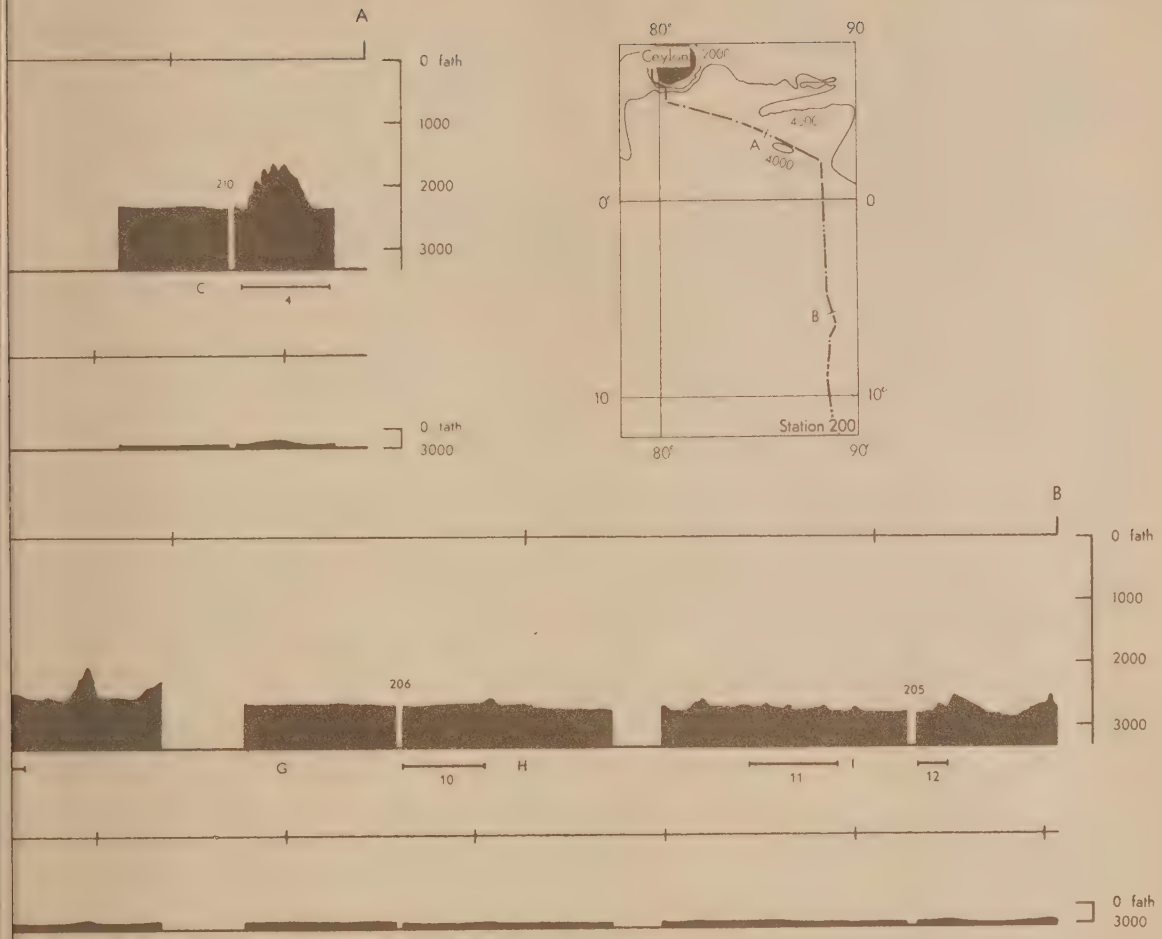

Station 138



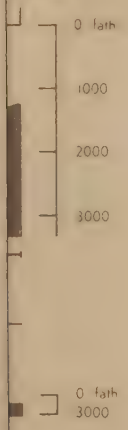
## Profile XI


A
90
100
110°
Surabaya
4000
10°
Station 200
A
B
6000
10
20
90
100
110°
20°
0 fath.
2000
4000
198
C
0 fath
4000
B
0 fath.
1000
2000
3000
4000
193
192
191
190
189
188
G
H
10
11
11
0 fath
4000
Surabaya
0 fath
1000
2000
3000
4000
182
14
15
0 fath
4000

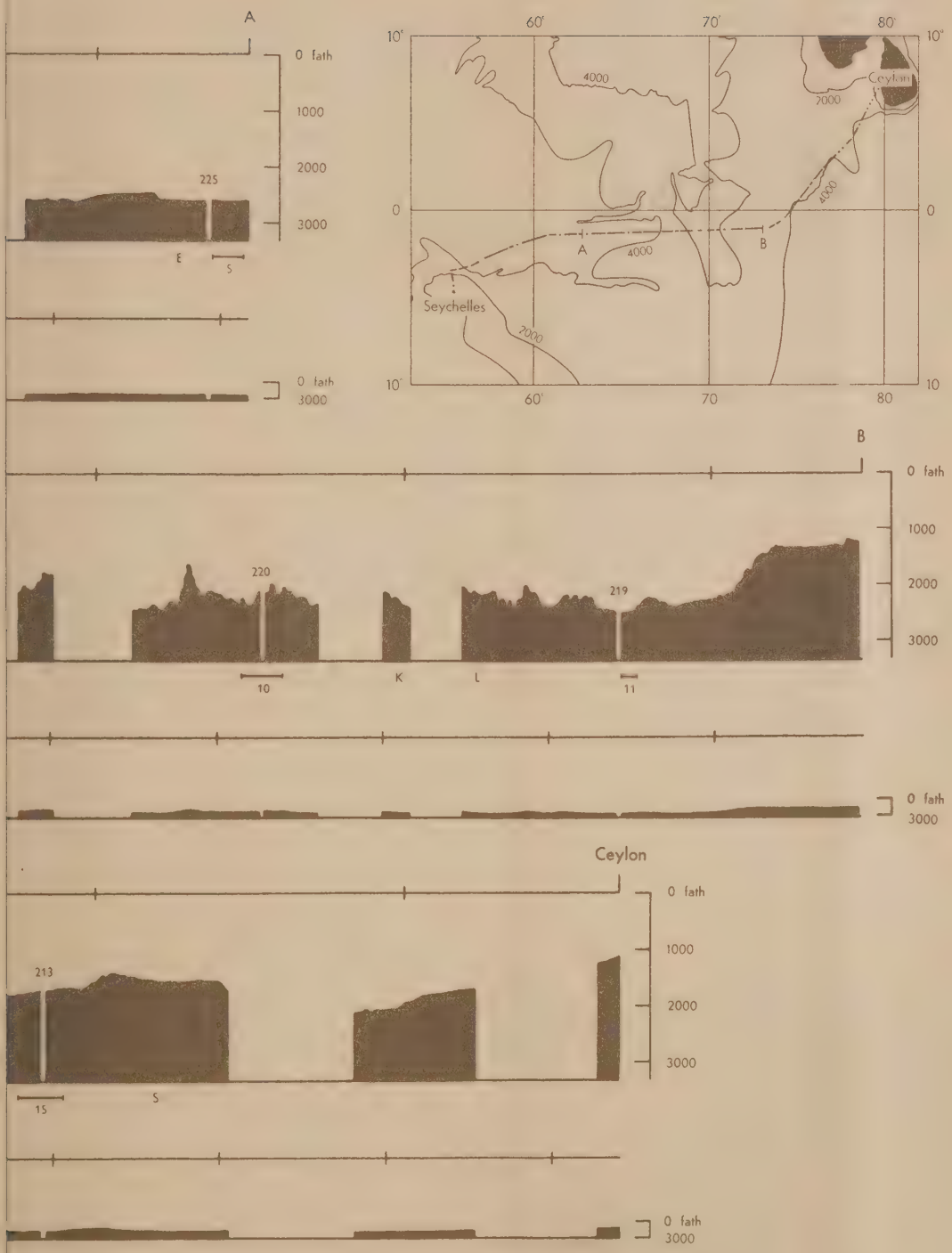
# Profile XII



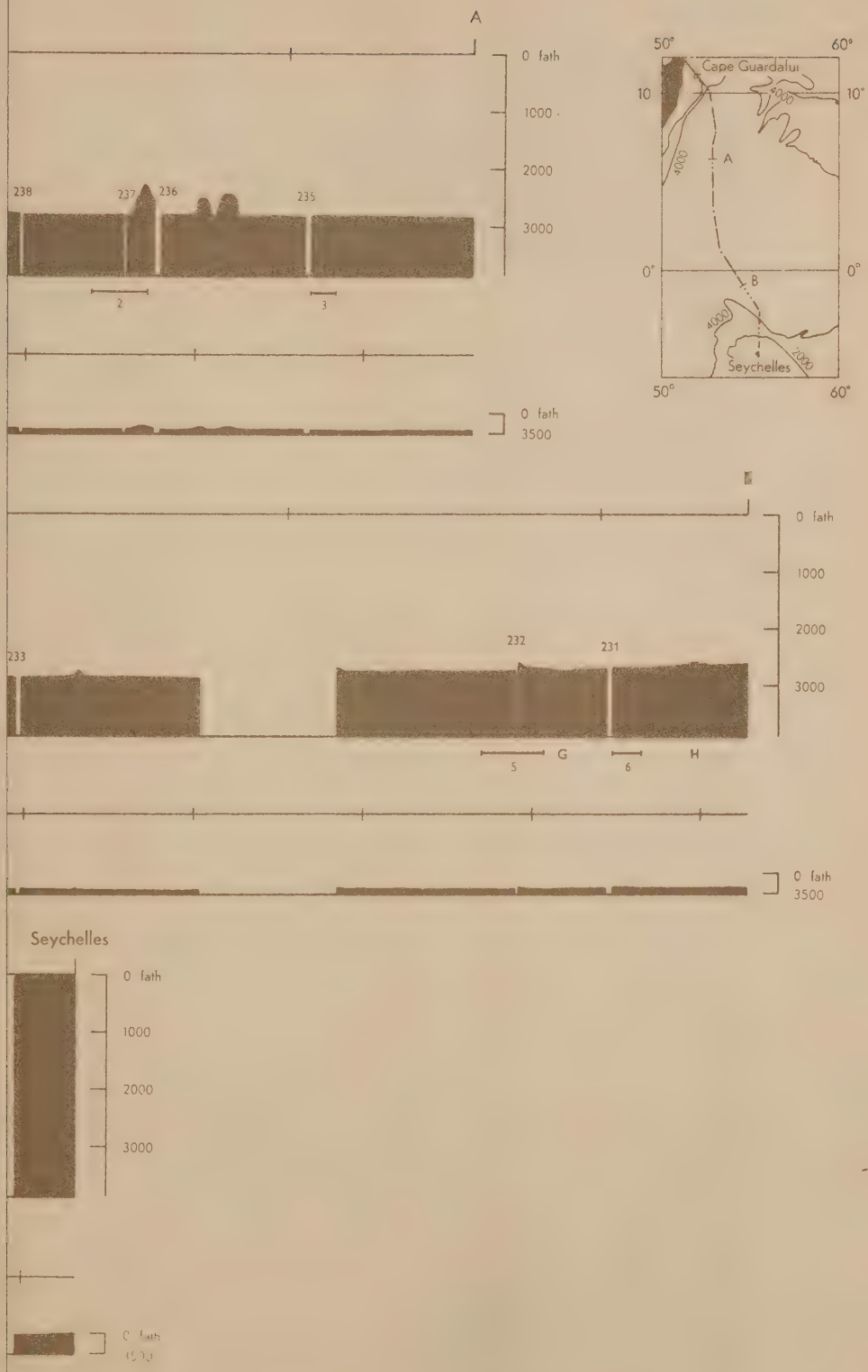

on 200



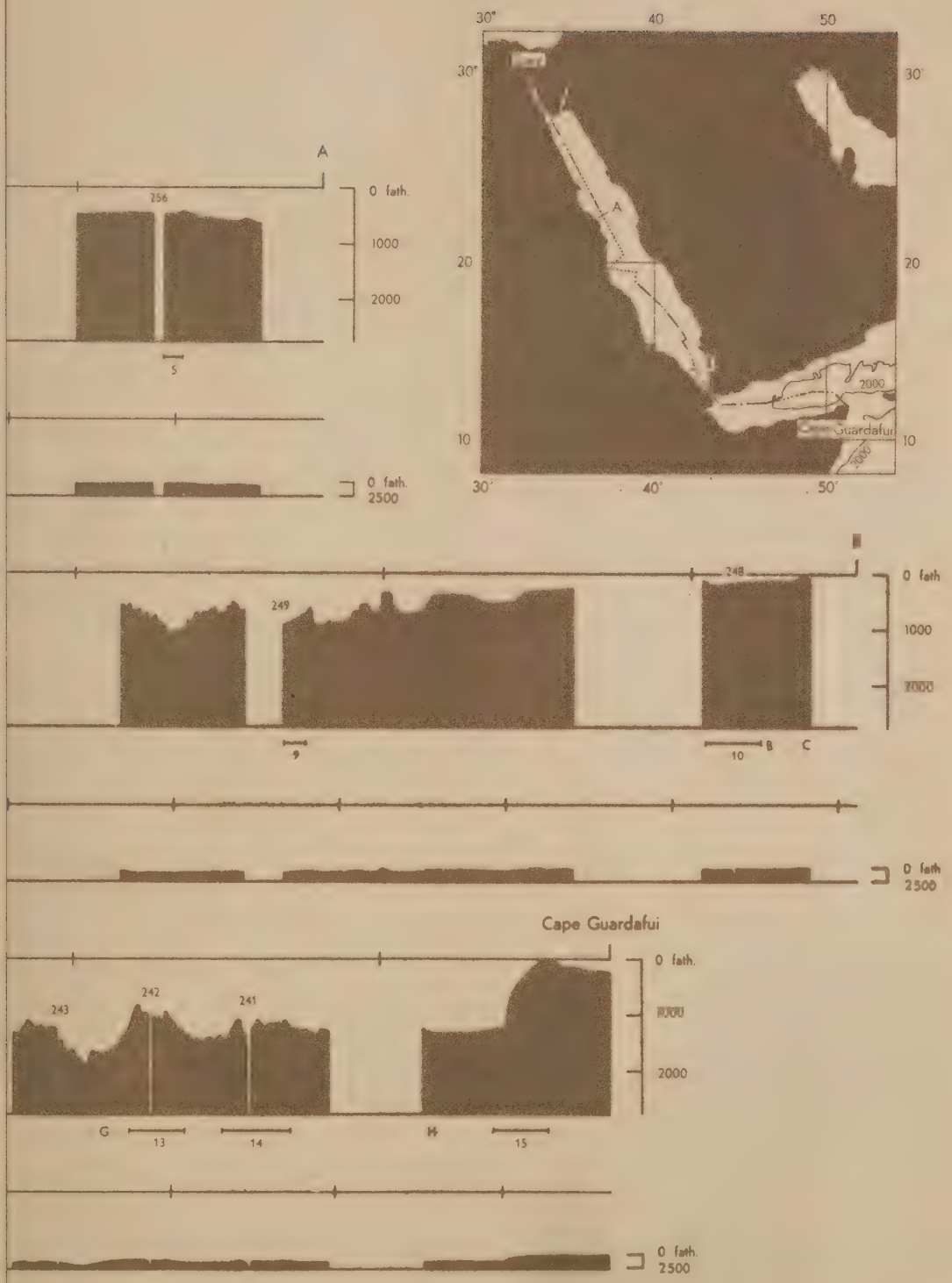
# Profile XIII



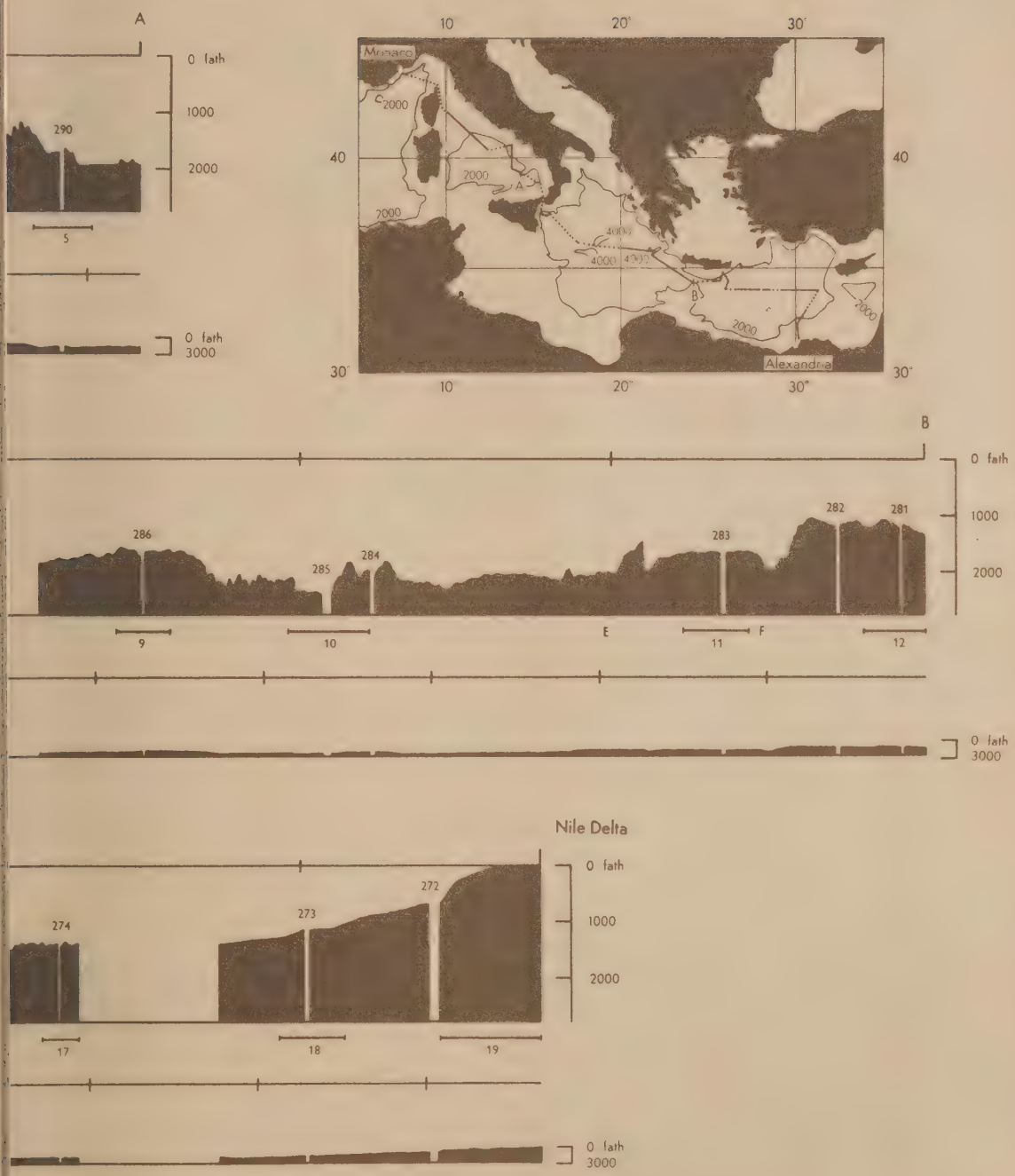
# Profile XIV


A
0 fath
1000
2000
3000
238
237
236
235
2
3
0 fath
3500
50°
60°
Cape Guardafui
10
10°
4000
A
0°
0°
B
Seychelles
50°
60°
233
232
231
5
G
6
H
0 fath
1000
2000
3000
0 fath
3500
Seychelles
0 fath
1000
2000
3000

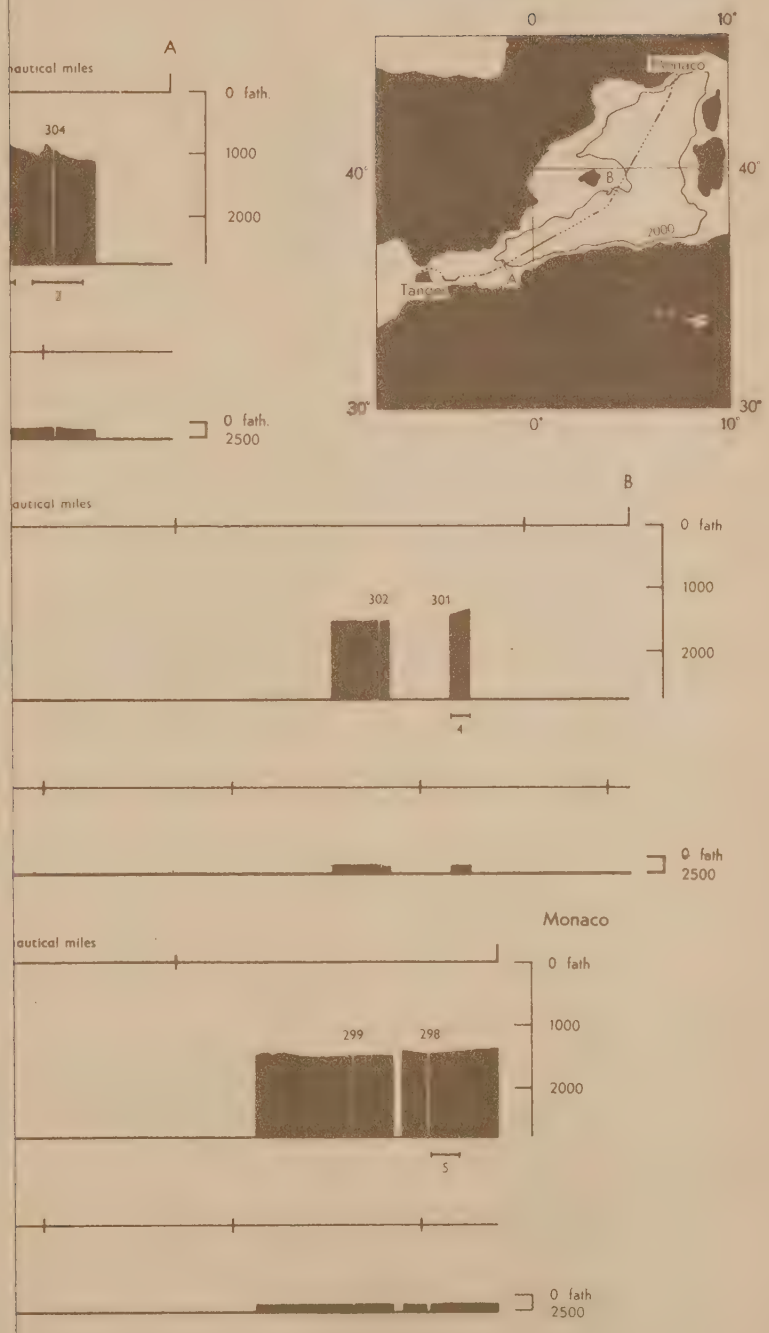
# Profile XV

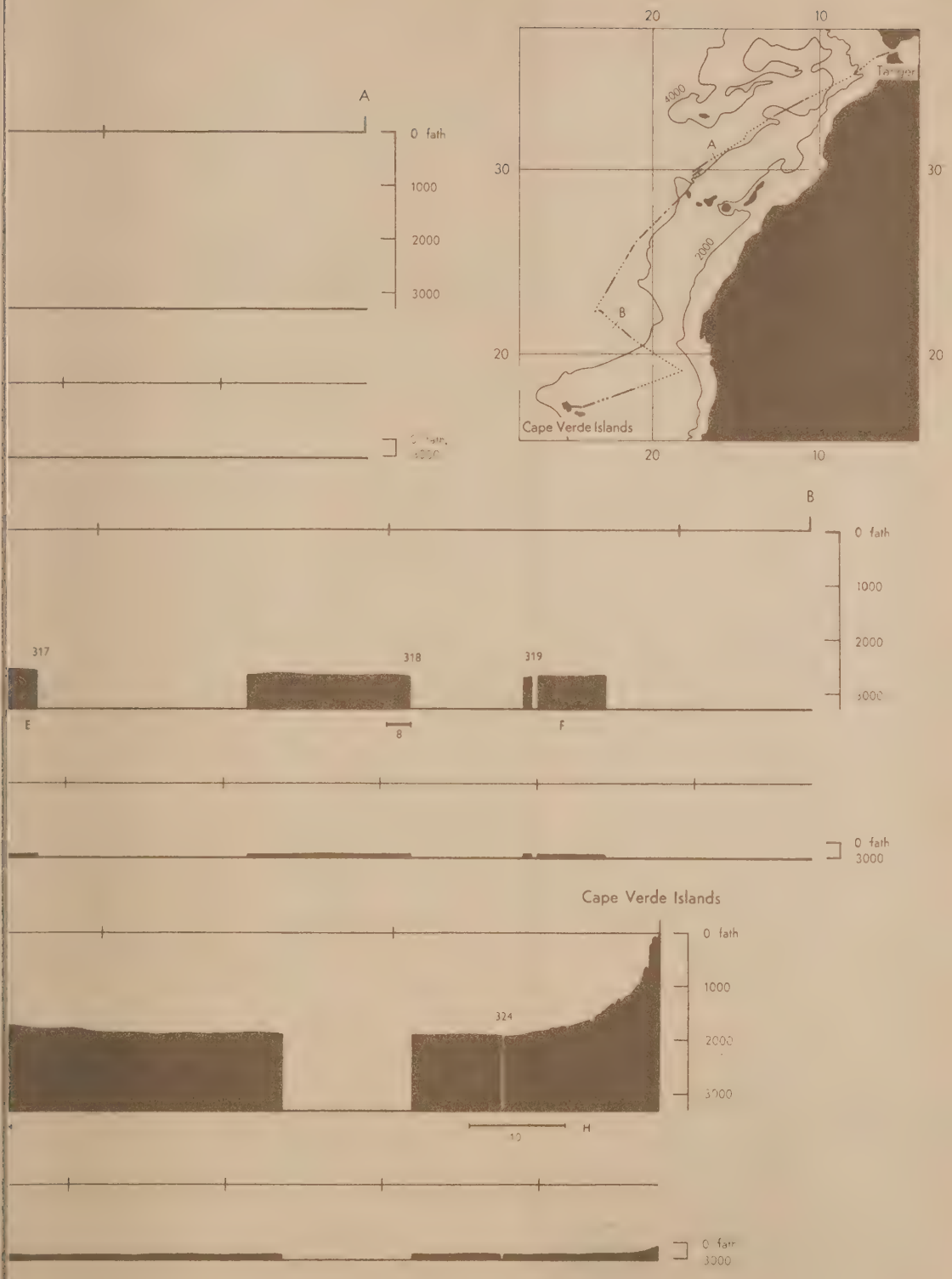

30°
40
50
30°
30°
20
20
10
10
30°
40°
50°
A
256
0 fath.
1000
2000
5
0 fath.
2500
2000
Guardafui
2000
249
248
0 fath
1000
2000
9
10
B
C
0 fath
2500
Cape Guardafui
243
242
241
0 fath.
1000
2000
G
13
14
H
15
0 fath.
2500

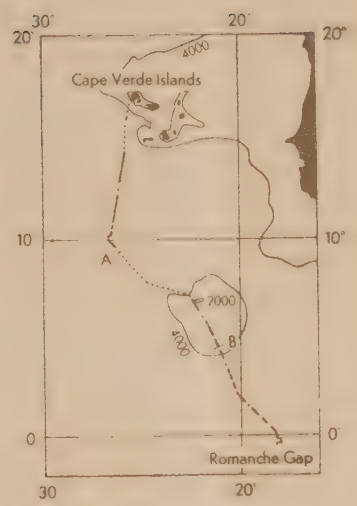
# Profile XVI

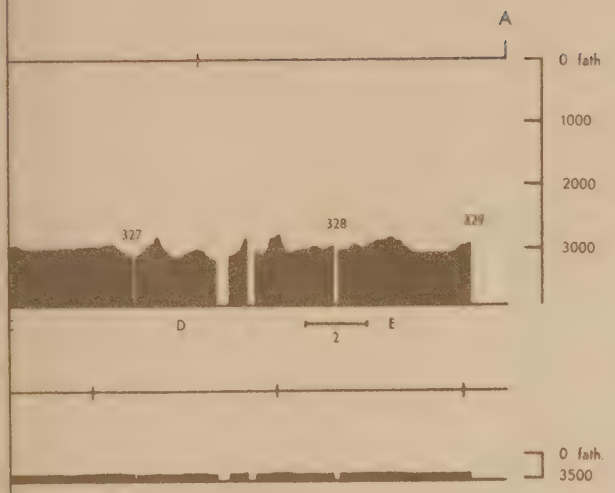

A
0 fath
1000
2000
290
5
0 fath
3000
10°
20°
30°
40°
30°
Monaco
2000
2000
2000
4000
4000
4000
A
B
2000
2000
Alexandria
B
0 fath
1000
2000
286
285
284
283
282
281
9
10
E
11
F
12
0 fath
3000
Nile Delta
0 fath
1000
2000
274
273
272
17
18
19
0 fath
3000

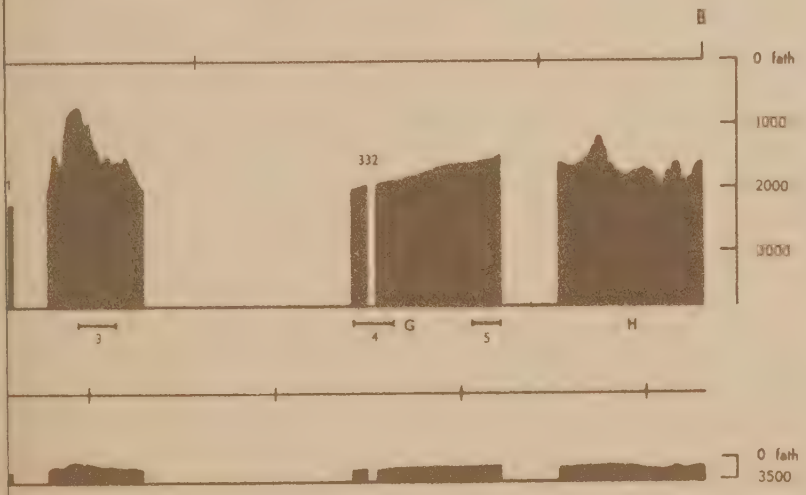
# Profile XVII

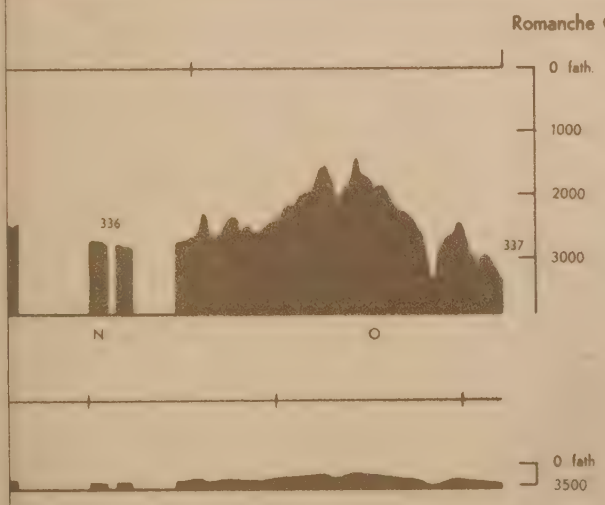



20
10
Tangier
4000
A
30
30
2000
B
20
20
Cape Verde Islands
20
10
A
0 fath
1000
2000
3000
B
0 fath
1000
2000
3000
317
318
319
E
8
F
0 fath
3000
Cape Verde Islands
0 fath
1000
324
2000
3000
10
H
0 fath
3000

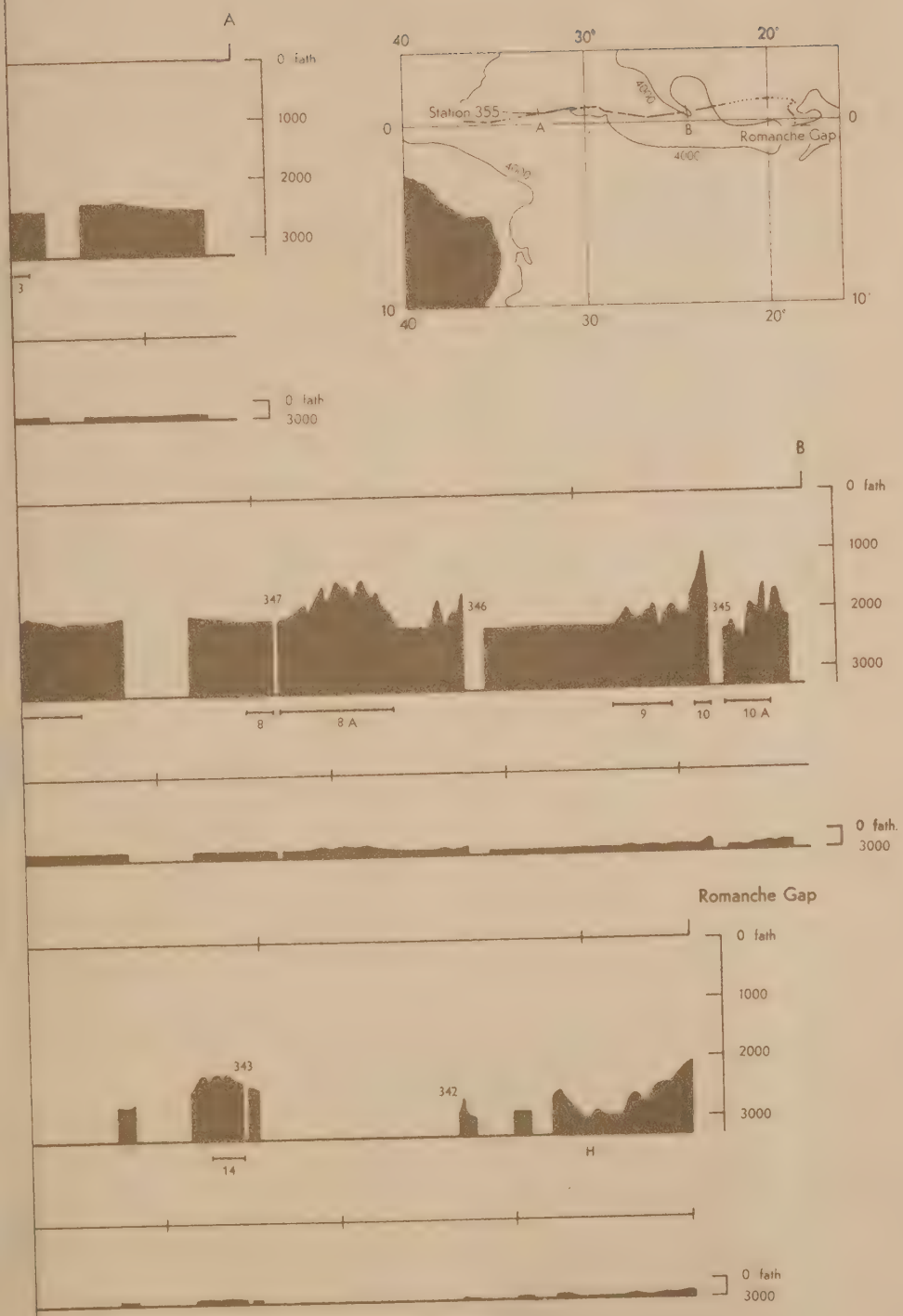

30°
20°
20°
4000
Cape Verde Islands
10
10°
A
2000
4000
B
0
0°
Romanche Gap
30
20°

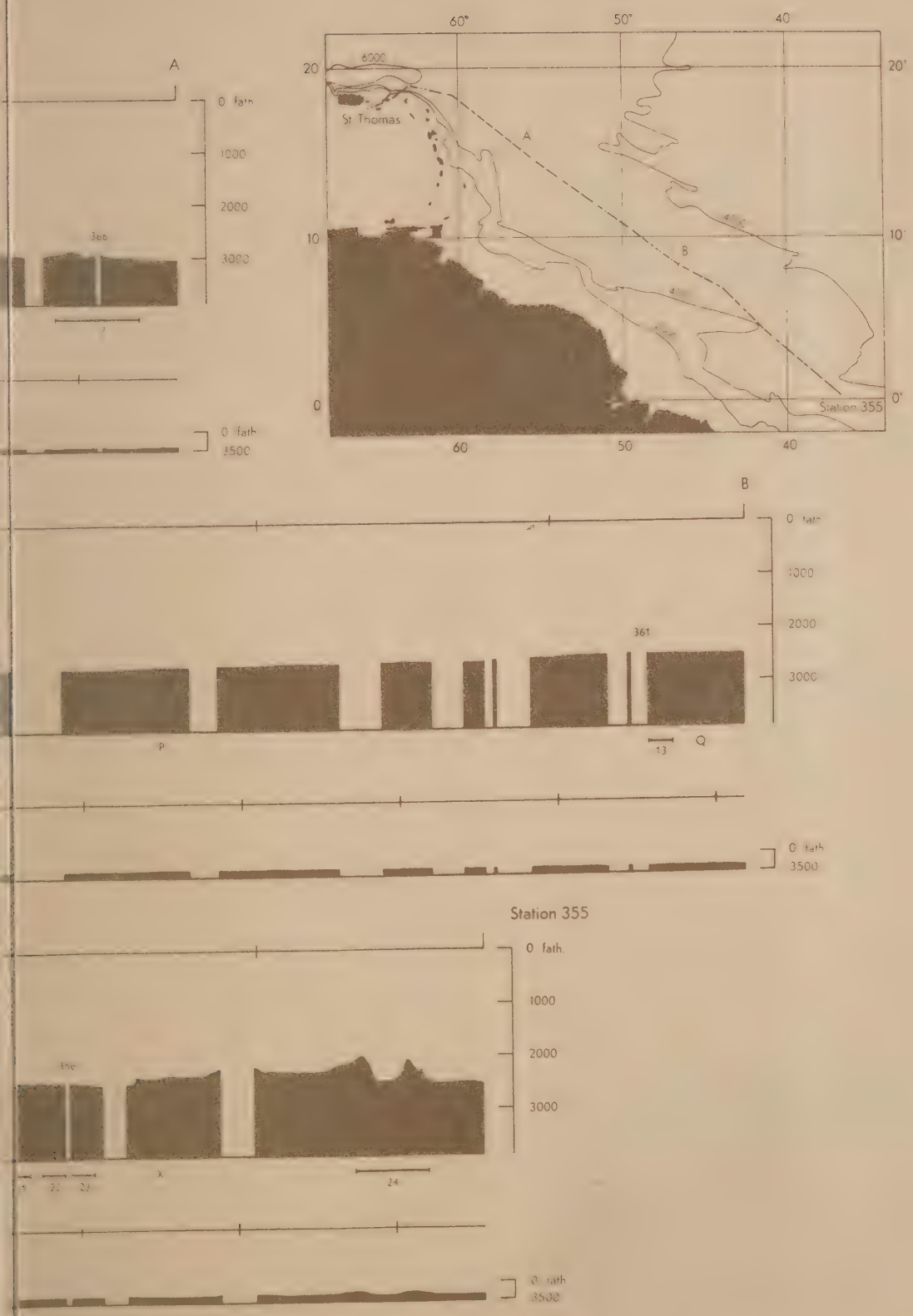

A
0 fath
1000
2000
3000
327
328
329
D
2
E
0 fath.
3500

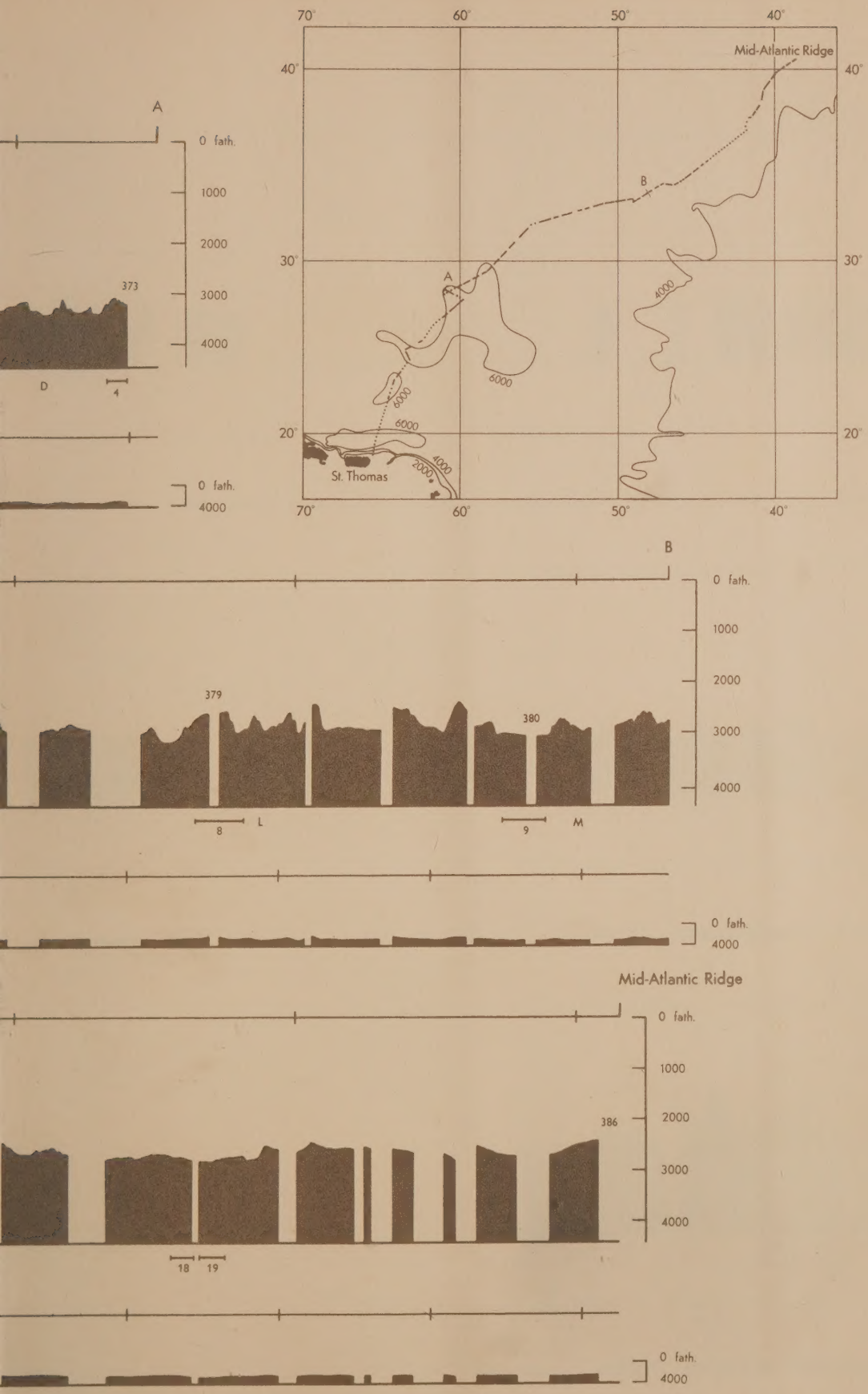

B
0 fath
1000
2000
3000
332
3
4
G
5
H
0 fath
3500


Romanche Gap
0 fath.
1000
2000
3000
336
337
N
O
0 fath
3500

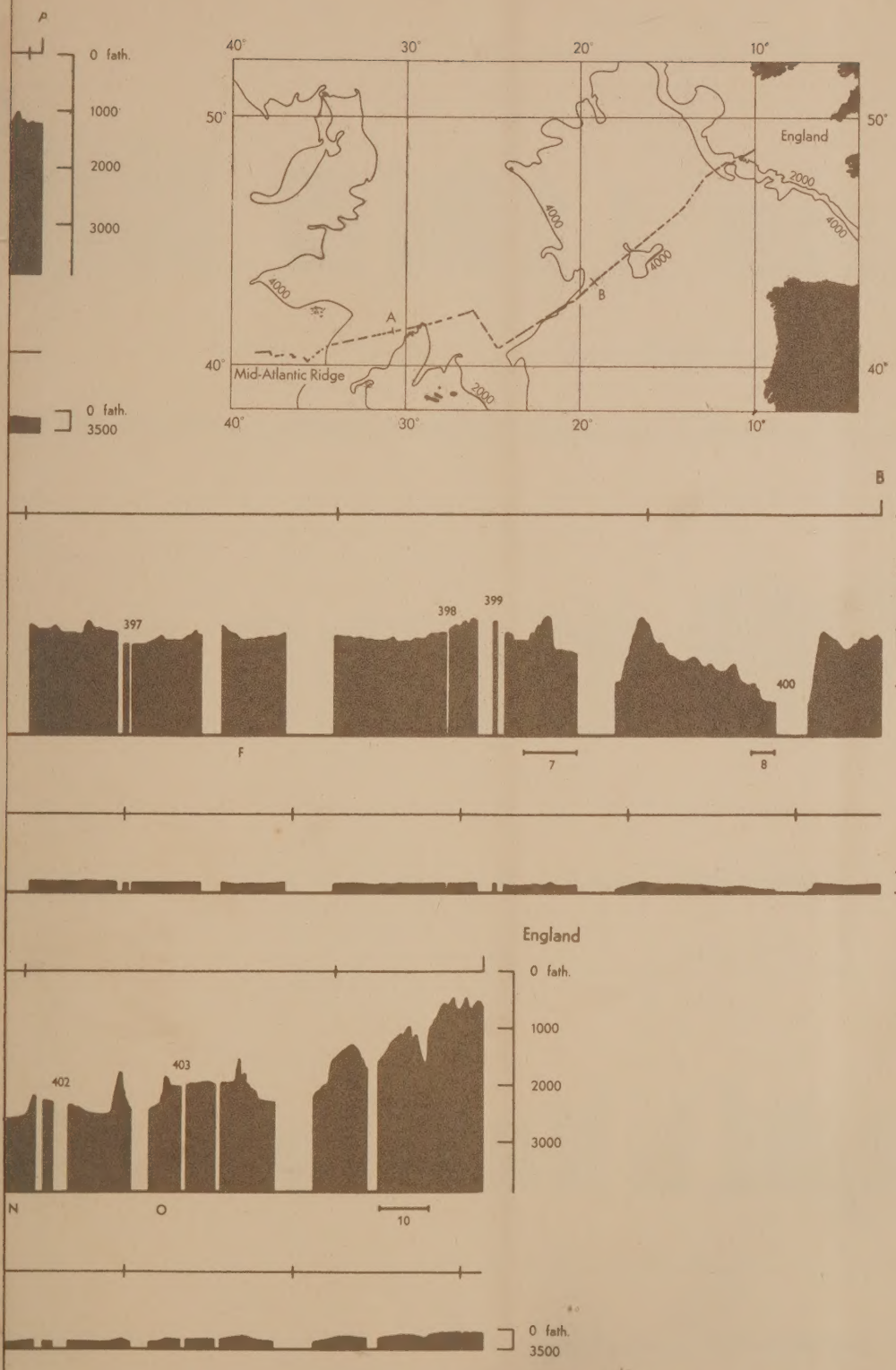
# Profile XX


A
0 fath
1000
2000
3000
3
0 fath
3000
40
30°
20°
Station 355
A
B
Romanche Gap
4000
4000
0
10
40
30
20°
10
B
0 fath
1000
2000
3000
347
346
345
8
8 A
9
10
10 A
0 fath.
3000
Romanche Gap
0 fath
1000
2000
3000
343
342
14
H
0 fath
3000


60°
50°
40
20°
10°
0°
6000
St Thomas
A
B
Station 355
A
0 fath
1000
2000
3000
0 fath
3500
B
361
P
Q
13
Station 355
0 fath.
1000
2000
3000
X
24
0 fath
3500


70°
60°
50°
40°
Mid-Atlantic Ridge
40°
30°
20°
A
B
4000
6000
8000
6000
4000
2000
St. Thomas
A
0 fath.
1000
2000
3000
4000
373
D
4
0 fath.
4000
B
0 fath.
1000
2000
3000
4000
379
380
8
L
9
M
0 fath.
4000
Mid-Atlantic Ridge
0 fath.
1000
2000
3000
4000
386
18
19
0 fath.
4000

# Profile XXIII



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*Printed in Sweden*
*July 1956*

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ELANDERS BOKTRYCKERI AKTIEBOLAG
1956

PRICE SW. KR. 40:—